



23rd International Symposium on
Mathematical Programming

July
1–6

The World Congress of Mathematical Optimization
Held triennially on behalf of the Mathematical
Optimization Society



 @ismp2018

<https://ismp2018.sciencesconf.org>

Useful Information

Conference Sites

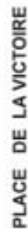
The conference takes place in the center of the city of Bordeaux over two sites:

"Victoire" is the main site where all parallel sessions and keynote talks take place. It is located on Place de la Victoire, 33000 Bordeaux (the lower red dot on the map). The buildings are identified by a letter as presented below. This building reference is reported in the schedule along the name of the room.

"Auditorium" is the secondary site where all parallel plenary and semi-plenary sessions take place, as well as the opening ceremony. It is located on 9-11-13 cours Georges Clemenceau 33000 Bordeaux (the upper red dot on the map).

The two sites are within a 15 minutes walk or a two-stop ride per tramway (with one tramway every 3 to 5 minutes). The registration desk has 1500 tramway/bus pass to distribute to those of you who prefer to take the tramway rather than walking. Note that the tramway will be overcrowded if all of us attempt to transfer between the two sites via this line. Hence, please consider walking. Tramway/bus pass may be useful to attendees having their accommodation far away for the conference site. They will be distributed on the first come first served basis, but their number should be largely sufficient to cover all requests.





Campus Zones

A partition of Victoire campus per zone rather than per building is described below. A **zone is associated to a floor** that spans over several builings of a given area of the campus. Zones are numbered in sequential order of their cummuntation link (stairway or corridor path).

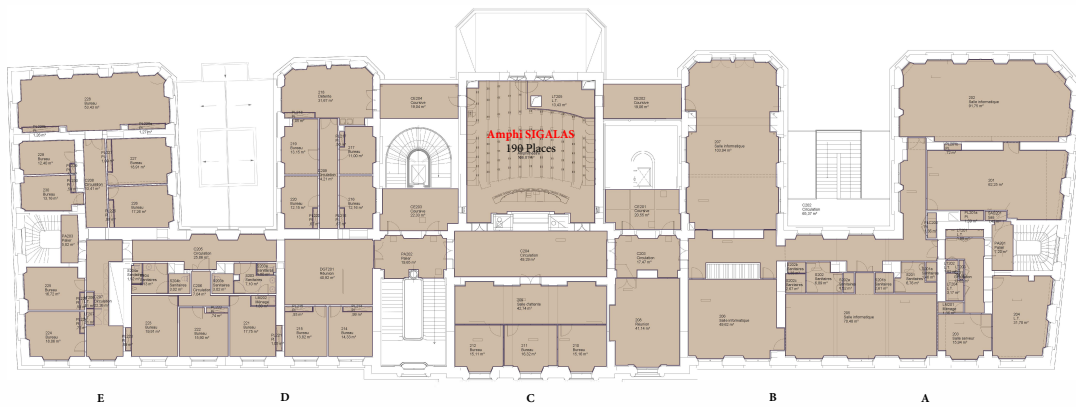
Zone 1 across buildings ABCDE, 3^d floor



Zone 2 across buildings ABCDE, 2^d floor

Bâtiment A - B - C - D - E

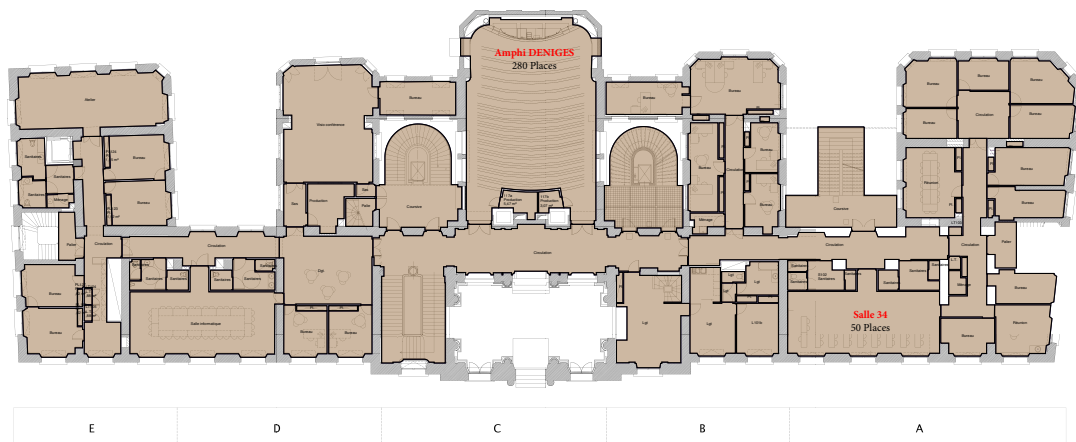
Niveau R+2



Zone 3 across buildings ABCDE, 1th floor

Bâtiment A - B - C - D - E

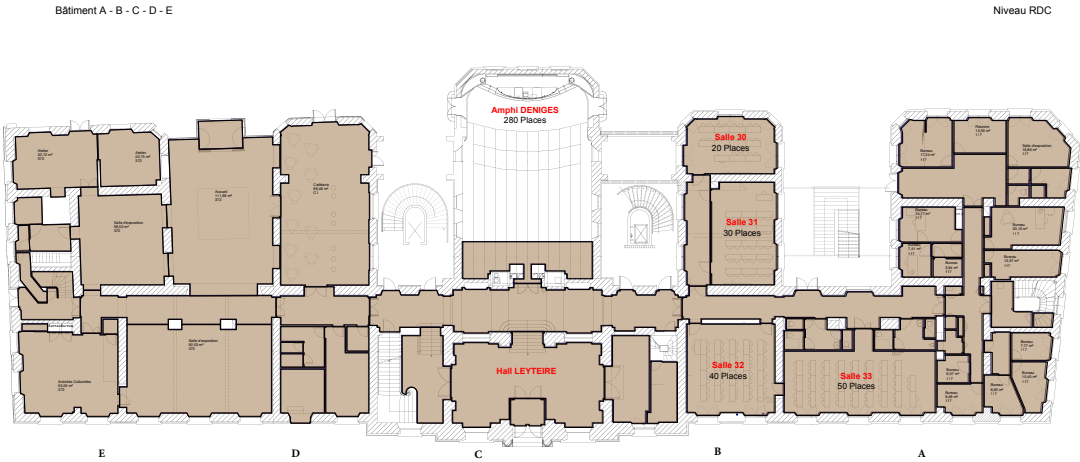
Niveau R+1



Zone 4 across buildings ABCDE, 1th intermediate floor



Zone 5 across buildings ABCDE, ground floor



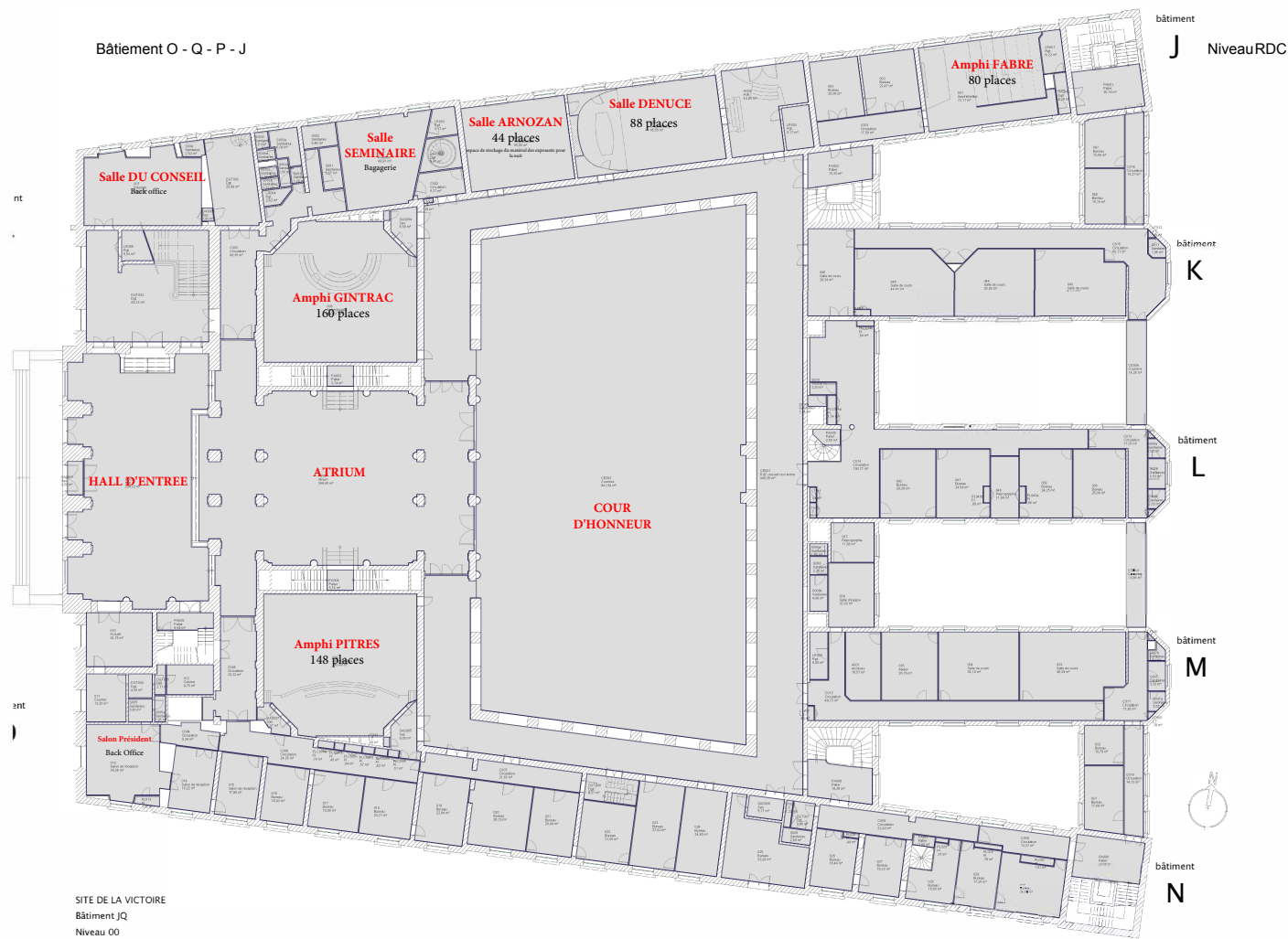
Zone 6 building G, all floors



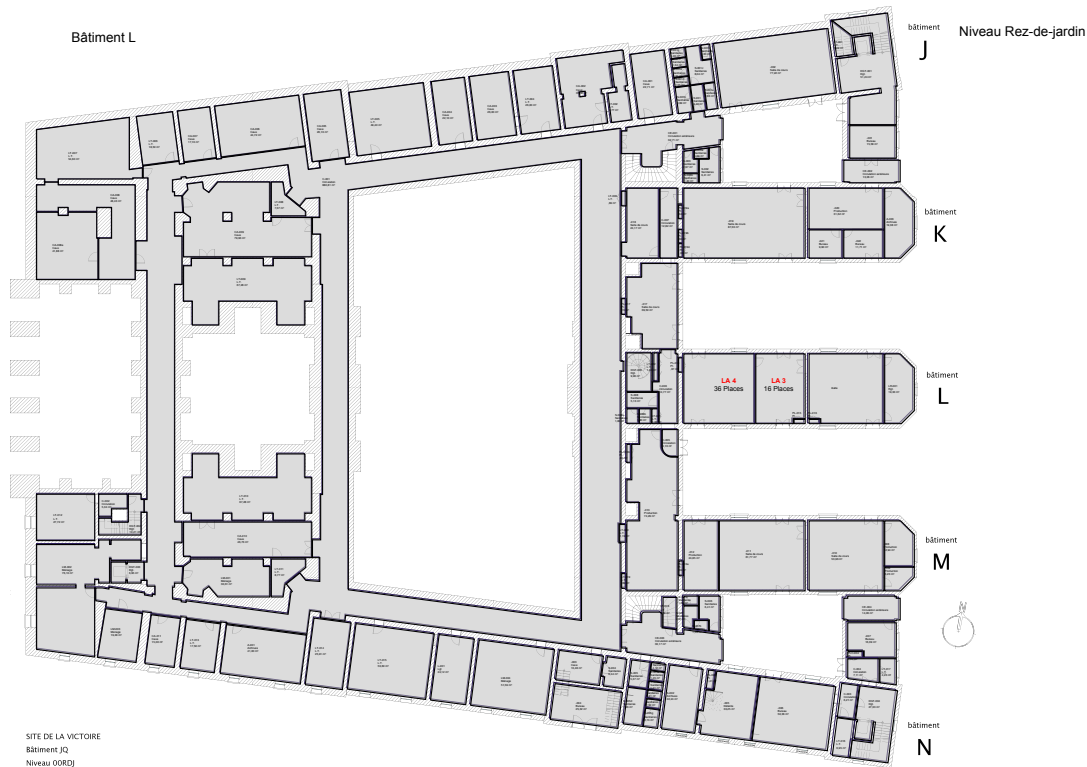
Zone 7 building I, all floors



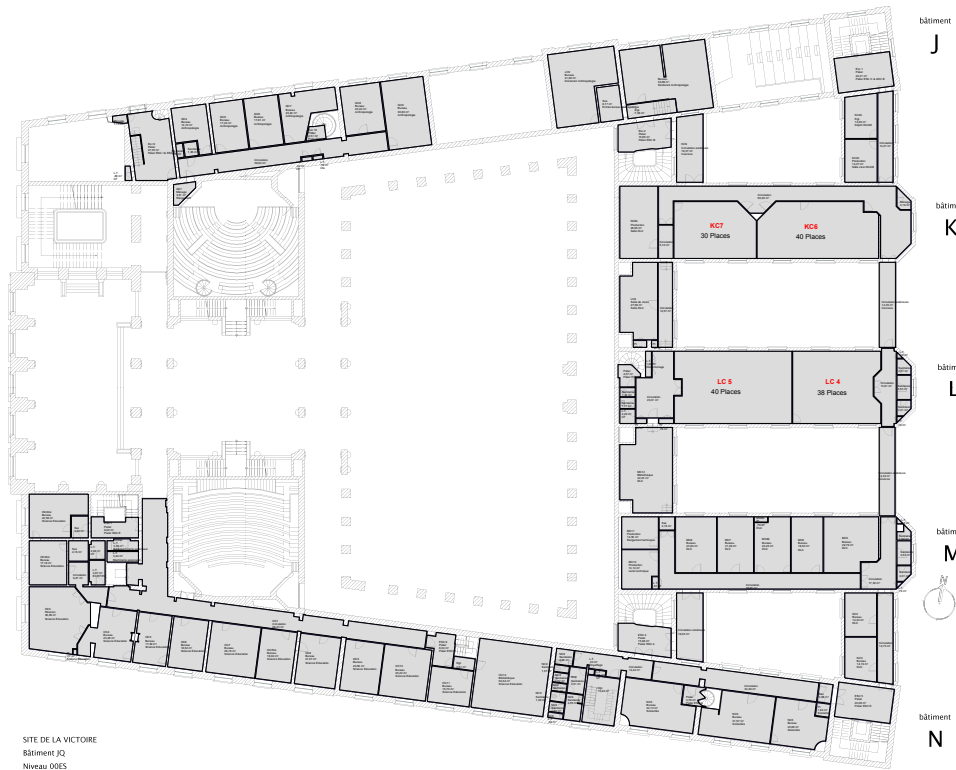
Zone 8 buildings JKLNOQ, ground floor



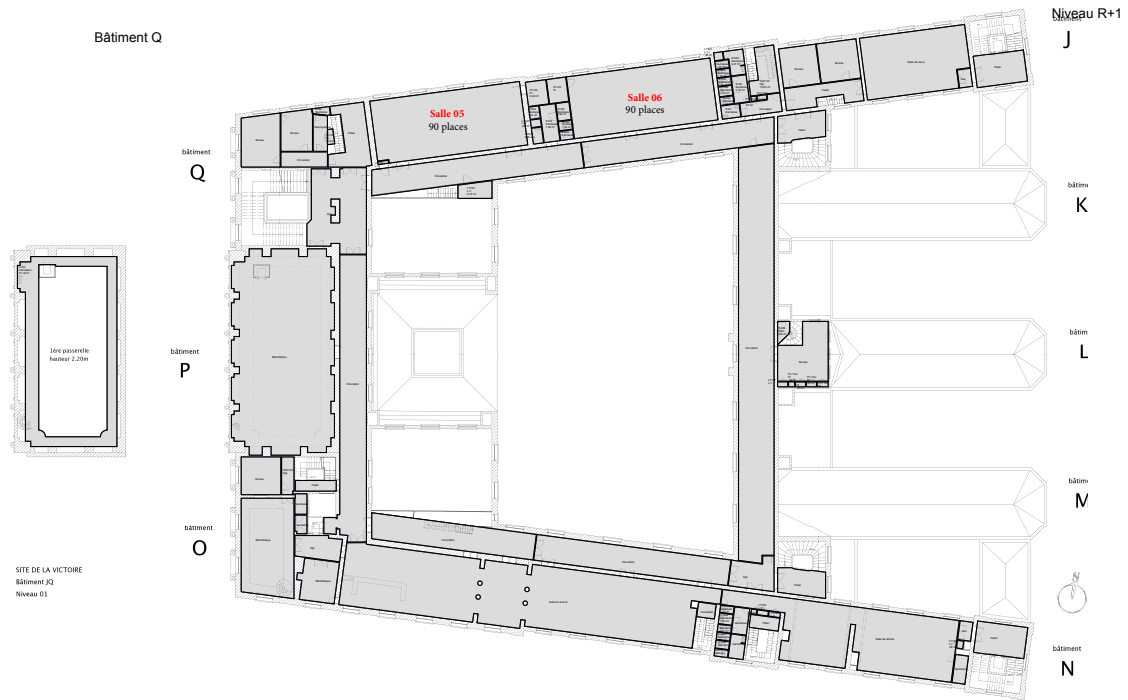
Zone 9 buildings JKLNOQ, 1th intermediate floor



Zone 10 buildings JKLNOQ, 2^d intermediate floor



Zone 11 buildings JKLNOQ, 1th floor



Zone 12 buildings JKLNOQ, 4th floor

no picture

Registration

- The registration desk is at the entrance of the main Victoire site.
- Registration is open on Sunday July 1 from 2pm to 8pm. You are invited to collect your badge and goodies on your arrival.
- The registration desk will remain open all week for late arrival, on-site registration, and information queries from Monday to Friday from 8:30 am to 6:30pm.
- Note that no registration is possible at the secondary site of the Auditorium.
- We did send you by email a pdf file with your badge. So, if you cannot make it in time to the registration desk (or wish to avoid the queue) before attending your first session, you may get access to the conference by presenting your own print of your badge. It needs not be in color, a basic black and white copy will do as the access code printed on the badge can be read in B&W. In any case, a color copy is waiting for you at the registration desk.

ISMP App

The ISMP2018 App is available on <https://ismp2018.u-bordeaux.fr/program>. It allows you to consult the conference program, the authors list, and the room map.

- Talks are sorted by day and session. Select a day on the top bar. Click on a session to see the talk details.
- Swipe left on a talk to add it to your favorites. Swipe left on a favorite to remove it.
- For quicker navigation, you can use the filter menu to select only streams that are of interest to you. To unselect streams that you don't want use the top right filter button.
- For offline mobile consultation: you can easily download the website app as an autonomous application (PWA). Under Android or iOS, go into your browser menu, and select "Add to Home screen".
- To refresh data on the schedule view, swipe down at the top of the page.

The Scheduler

You might be curious to know how the program has been established. From your talk submissions, the scientific committee of each stream has built sessions, indicating the expected attendance and the potential conflicts with other sessions of their own stream or with other streams. They also implemented time restrictions and precedence constraints. The scheduler had this information along side the expected attendance in each stream thanks to your input on the fraction of your time that you plan to spend in each stream. The scheduler went through a sequence of optimization stages to build a program with the following goals: first to minimize the number of parallel tracks in each thematic area; second to spread evenly the high profile sessions, while reducing the spread of the mini-symposia; third to avoid to schedule in parallel sessions that are destined to a same public (including the co-authors wishing to avoid having their talks in parallel); fourth to cluster streams geographically trying to keep their room assignment stable.

Lunch breaks

Lunches are on your own. The late morning and early afternoon sessions are purposely on different sites so as to spread the crowd in town for lunch. There are two food trucks on the Victoire site as well as a sandwich bar (the latter runs only from Tuesday onwards).

Coffee breaks

Coffee breaks are served in the morning from 10:30am to 11am on the ground floor at both end of the Victoire campus (Buildings C and P). French pastries are offered. There are no coffee breaks at the Auditorium. At the afternoon break, no coffee is served. However self-service expresso machines are disseminated on the Victoire campus along with water bottle for your comfort at any time of the day.

Wifi connection

At the Victoire site, you can connect using either your “eduroam” account, or on the REAUMUR network using the ISMP account:

Login: ISMP-n-1 Password: q3#bjkG

Instructions to Speakers

Each lecture room is equipped with a video projector requiring a **VGA connection**. Speakers are expected to bring their own laptop for their presentation. However, for easy transition between talks, we ask that all the speakers of a session collect their talks on a single computer (typically the laptop of the last speaker). Please introduce yourself to the chairman of the session before hand by getting to the lecture room at least 5 minutes prior to the session start time. We strongly advice speakers to have their slides in a **PDF format**. Please avoid powerpoint or any other specific software.

Instructions to Chairpersons

Please get to your lecture room at least 10 minutes prior to the session start time. Collect all the presentations, preferably in a pdf format, on a single computer and check that the video retransmission is working OK for each talk. It is absolutely necessary to keep to the exact time slots that are assigned in the conference program. Sessions do come in two formats, either 30 minute talks or 20 minute talks. Please do not take the liberty to change the length of time that is assigned to a speaker, as it is essential to allow the attendees to synchronize their selection as announced in the program. In the same line, if a talk is canceled, do not move other talks forward but leave the slot empty.

Video Retransmission

The opening ceremony, as well as the plenary and semi-plenary sessions, that take place at the Auditorium, are retransmitted on the Victoire site in the following rooms: **Amphi Broca** (external building, top floor), **Amphi Gintrac** (Building Q, ground floor) and **Amphi Pitres** (Building O, ground floor).

Welcome Event on Sunday

Alongside registration on Sunday afternoon from 2pm to 8pm, we have a wine tasting event at the Victoire site to welcome you in Bordeaux. Attendees who have not registered for this event can do it on site.

Conference Dinner on Wednesday

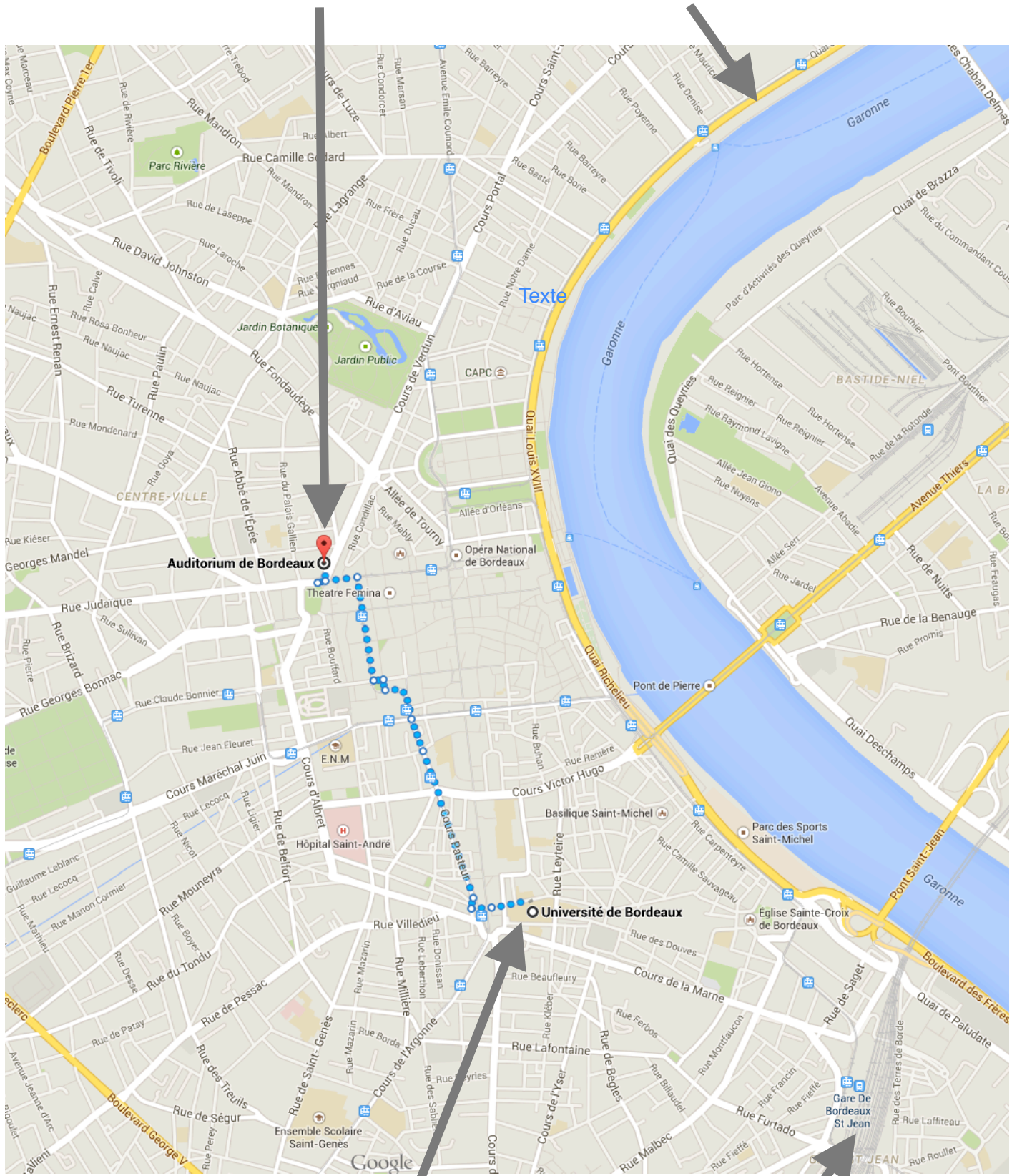
The conference dinner will take place on the Garonne river bank, at Hangar 14 (see the map below) from 7:30pm to 11:30pm. This casual banquet is organized to induce encountering between the 1000 participants. You will enjoy the wine of Chateau Couhins, a Pessac-Leognan, property of the research institute in agronomy (INRA). The finest catering is delivered by Lacoste.

Farewell Party on Friday

On Friday evening, we hold an informal banquet at the modern art museum, named CAPC (musée d’art contemporain de Bordeaux, Rue Ferrère, Entrepôt Lainé). Finger food and more, wine and draft beer, ... to enjoy the company of your friends before leaving.

Auditorium for Plenaries

Hanger 14 for Conf. Dinner



University buildings for Parallel Sessions

Train station

		<u>Sun.01</u>	<u>Mon.02</u>	<u>Tue.03</u>	<u>Wed.04</u>	<u>Thu.05</u>	<u>Fri.06</u>
8AM	A			Parallel Sessions 4x30 min	Parallel Sessions 4x30 min	Parallel Sessions 4x30 min	Parallel Sessions 4x30 min
9AM			Opening Cerenomy				
10AM				Coffee Break	Coffee Break	Coffee Break	Coffee Break
	B		Break				
11AM			Plenary Talk	Semi-Plenary + Keynote speakers	Semi-Plenary + Keynote speakers	Semi-Plenary + Keynote speakers	Semi-Plenary + Keynote speakers
12AM	C		Meeting of the MPC editorial board	Meeting of the MPA/B editorial boards	Meeting of MOS and Springer delegations	SIOPT board meeting	
1PM							
2PM	D	Registration and wine testing	Semi-Plenary + Keynote speakers	Plenary Talk	Plenary Talk	Plenary Talk	Plenary Talk
3PM			Break	Break	Break	Break	Break
4PM	E		Parallel Sessions 3x30 min	Parallel Sessions 3x30 min	Parallel Sessions 3x30 min	Parallel Sessions 3x30 min	Parallel Sessions 3x30 min
5PM							
6PM	F		Parallel Sessions 4x20/3x30 min	MOS Business Meeting	Parallel Sessions 4x20/3x30 min	Parallel Sessions 4x20/3x30 min	Parallel Sessions 4x20/3x30 min
7PM			MOS council meeting	Optimization discussion group			
8PM	G				Conference Dinner		Farewell Party
9PM							

Special Events

Business Meetings

- **Meeting of the MPC editorial board:** Monday July 2 at lunch time, salle Arnozan, building Q on the ground floor.
- **MOS council meeting:** Monday, July 2 at 6:30 pm, salle Arnozan, building Q on the ground floor.
- **Meeting of the MPA/B editorial boards:** Tuesday July 3 at lunch time, salle Arnozan, building Q on the ground floor.
- **MOS business meeting:** Tuesday, July 3 at 5:00 pm, Amphi Broca, external building, top floor.
- **Optimization discussion group** (sponsor: INFORMS Optimization Society): Tuesday, July at 6:30 pm, Amphi Deniges, building C, on the ground floor.
- **Meeting of MOS with Springer:** Wednesday at lunch time, salle Arnozan, building Q on the ground floor.
- **SIOPT board meeting:** Thursday at lunch time, salle Arnozan, building Q on the ground floor.

Opening Ceremony

The Opening Ceremony takes place Monday July 2 from 9am to 11am at the Auditorium (place Cambetta). It features the Prize Awards:

1. The **Paul Y. Tseng Memorial Lectureship in Continuous Optimization**, for outstanding contributions in continuous optimization.
2. The **A.W. Tucker Prize**, for an outstanding thesis in mathematical programming.
3. The **Lagrange Prize in Continuous Optimization**, for outstanding work in continuous optimization.
4. The **Beale - Orchard Hays Prize**, for outstanding work in computational mathematical programming.
5. The **Delbert Ray Fulkerson Prize**, for outstanding papers in discrete mathematics. Sponsored jointly by MOS and the American Mathematical Society.
6. The **George B. Dantzig Prize**, for original research having a major impact on mathematical optimization.

The Ceremony will conclude with a show given by the University Chorale, singing a canticum jubilo by Haendel, a piece of Passereau, and Conquest Paradise by Vangelis.

Plenary Sessions

On the relationship between machine learning and optimization

by **Francis Bach**, INRIA - ENS, FR
PLENARY - Mo 11:00am-12:00am
INVITED SESSION 552
Room: Auditorium Building: Symphony Hall, Zone: 0
Chair: Michel Goemans, MIT, US

The Resurgence of Proximal Methods in Optimization

by **Marc Teboulle**, Tel Aviv University, IL
PLENARY - Tu 1:30pm-2:30pm
INVITED SESSION 555
Room: Auditorium Building: Symphony Hall, Zone: 0
Chair: Claudia Sagastizabal, Unicamp, BR

Relaxations and Approximations of Chance Constraints

by **Shabbir Ahmed**, Georgia Tech, US
PLENARY - We 1:30pm-2:30pm
INVITED SESSION 525
Room: Auditorium Building: Symphony Hall, Zone: 0
Chair: Simge Kucukyavuz, University of Washington, US

Randomness, risk and electricity prices

by **Andy Philpott**, University of Auckland, NZ
PLENARY - Th 1:30pm-2:30pm
INVITED SESSION 554
Room: Auditorium Building: Symphony Hall, Zone: 0
Chair: Michael Ferris, University of Wisconsin, US
Co-Authors: *Michael Ferris,*

Bounds for quantum graph parameters by conic and polynomial optimization

by **Monique Laurent**, CWI and Tilburg University, NL
PLENARY - Fr 1:30pm-2:30pm
INVITED SESSION 553
Room: Auditorium Building: Symphony Hall, Zone: 0
Chair: Frank Vallentin, University of Cologne, DE
Co-Authors: *Sander Gribling, David de Laat, Sabine Burgdorf, Teresa Piovesan,*

Semi-Plenary and Keynote Sessions

What's happening in nonconvex optimization? A couple of stories

by **Emmanuel Candes**, Stanford University, US
KEYNOTE - Mo 1:30pm-2:30pm
INVITED SESSION 536
Room: SIGALAS Building: C, 2nd floor , Zone: 2
Chair: Jean-Baptist Hiriart-Urruty, Paul Sabatier University, FR
Co-Authors: *Yuxin Chen*,

Theoretical Analysis of Cutting-Planes in IP Solvers.

by **Santanu Dey**, GaTech, US
KEYNOTE - Mo 1:30pm-2:30pm
INVITED SESSION 538
Room: DENIGES Building: C, Ground Floor , Zone: 5
Chair: Gerard Cornuejols, Carnegie Mellon University, US
Co-Authors: *Marco Molinaro*,

Multiobjective Optimization with PDE Constraints

by **Michael Hintermüller**, WIAS Berlin, DE
SEMI - Mo 1:30pm-2:30pm
INVITED SESSION 550
Room: Auditorium Building: Symphony Hall, Zone: 0
Chair: Stephen Wright, U Wisconsin-Madison, US

Asymptotic Lagrangian duality for nonsmooth optimization

by **Regina Burachik**, UniSA, AU
KEYNOTE - Tu 11:00am-12:00am
INVITED SESSION 541
Room: DENIGES Building: C, Ground Floor , Zone: 5
Chair: Xiaojun Chen, Hong Kong Polytechnic Univ., HK

Lower bounds on the size of linear programs

by **Thomas Rothvoss**, University of Washington, US
KEYNOTE - Tu 11:00am-12:00am
INVITED SESSION 545
Room: BROCA Building: W, 3rd floor , Zone: 0
Chair: Volker Kaibel, OVGU Magdeburg, DE

Adaptive Robust Optimization with Scenario-wise Ambiguity Sets

by **Melvyn Sim**, NUS, SG
SEMI - Tu 11:00am-12:00am
INVITED SESSION 551
Room: Auditorium Building: Symphony Hall, Zone: 0
Chair: Daniel Kuhn, EPFL, CH
Co-Authors: *Chen Zhi, Peng Xiong*,

Monotone Operator Theory in Convex Optimization

by **Patrick Combettes**, North Carolina State Univ., US
KEYNOTE - We 11:00am-12:00am
INVITED SESSION 537
Room: BROCA Building: W, 3rd floor , Zone: 0
Chair: Samir Adly, Laboratoire XLIM, FR

Online Competitive Algorithms for Resource Allocation

by **Maryam Fazel**, Univ. of Washington, US
KEYNOTE - We 11:00am-12:00am
INVITED SESSION 539
Room: DENIGES Building: C, Ground Floor , Zone: 5
Chair: Frank Curtis, Lehigh University, US

Model-Based Methods, Sampling Models, and A New Second-Order Model-Based Method

by **Luis Nunes Vicente**, University of Coimbra, PT
KEYNOTE - We 11:00am-12:00am
INVITED SESSION 546
Room: LEYTEIRE Building: E, 3rd floor , Zone: 1
Chair: Stefan Wild, Argonne National Laboratory, US

Insights via volumetric comparison of polyhedral relaxations

by **Jon Lee**, University of Michigan, US
SEMI - We 11:00am-12:00am
INVITED SESSION 548
Room: Auditorium Building: Symphony Hall, Zone: 0
Chair: Andrea Lodi, Polytechnique Montreal, CA

Cutting Planes in the Extended Space

by **Oktay Gunluk**, IBM Research, US
KEYNOTE - Th 11:00am-12:00am
INVITED SESSION 543

Room: BROCA Building: W, 3rd floor , Zone: 0
Chair: Adam Letchford, Lancaster University, GB

Effective Scenarios and Scenario Reduction for Risk-Averse Stochastic Programs

by **Tito Homem-de-Mello**, Universidad Adolfo Ibanez, CL
KEYNOTE - Th 11:00am-12:00am
INVITED SESSION 544
Room: DENIGES Building: C, Ground Floor , Zone: 5
Chair: Jim Luedtke, University of Wisconsin-Madison, US
Co-Authors: *Sebastian Arpon, Bernardo Pagnoncelli, Hamed Rahimian, Guzin Bayraksan,*

The BARON software for MINLP

by **Nikolaos Sahinidis**, Carnegie Mellon University, US
SEMI - Th 11:00am-12:00am
INVITED SESSION 547
Room: Auditorium Building: Symphony Hall, Zone: 0
Chair: Claudia D Ambrosio, LIX, FR

Majority judgment

by **Michel Balinski**, CNRS and Ecole Polytechnique, FR
KEYNOTE - Fr 11:00am-12:00am
INVITED SESSION 535
Room: LEYTEIRE Building: E, 3rd floor , Zone: 1
Chair: Martine Labbé, Université Libre de Bruxelles, BE

Submodularity in mixed-integer quadratic and conic quadratic optimization

by **Alper Atamturk**, UC Berkeley, US
KEYNOTE - Fr 11:00am-12:00am
INVITED SESSION 540
Room: DENIGES Building: C, Ground Floor , Zone: 5
Chair: Daniel Bienstock, Columbia University, US

Modern Branch-and-Cut Implementation

by **Matteo Fischetti**, University of Padua, IT
KEYNOTE - Fr 11:00am-12:00am
INVITED SESSION 542
Room: BROCA Building: W, 3rd floor , Zone: 0
Chair: Marc Pfetsch, TU Darmstadt, DE

Tseng Memorial Lectureship in Continuous Optimization

SEMI - Fr 11:00am-12:00am

INVITED SESSION 549

Room: Auditorium Building: Symphony Hall, Zone: 0

Chair: Yaxiang Yuan, Chinese Academy of Sciences, CN

Mini-Symposia

A.W. Tucker Prize Session

A.W. Tucker Prize Session

INTERFACE - Tu 3:15pm-4:45pm, Format: 3x30 min

Room: SIGALAS Building: C, 2nd floor, Zone: 2

CONTRIBUTED SESSION 559

Chair: Simge Kucukyavuz, University of Washington, US

Interface

Stochastic optimization

INTERFACE - We 8:30am-10:30am, Format: 4x30 min

Room: SIGALAS Building: C, 2nd floor, Zone: 2

CONTRIBUTED SESSION 314

Chair: Alexei Gaivoronski, NTNU, NO

Logistics

INTERFACE - We 3:15pm-4:45pm, Format: 3x30 min

Room: SIGALAS Building: C, 2nd floor, Zone: 2

CONTRIBUTED SESSION 388

Chair: Frieder Smolny, Technical University Berlin, DE

Solvers and softwares

INTERFACE - We 5:00pm-6:30pm, Format: 4x20 min

Room: SIGALAS Building: C, 2nd floor, Zone: 2

CONTRIBUTED SESSION 390

Chair: François Clautiaux, Université de Bordeaux, FR

Energy

INTERFACE - Th 8:30am-10:30am, Format: 4x30 min

Room: SIGALAS Building: C, 2nd floor, Zone: 2

CONTRIBUTED SESSION 387

Chair: Kazem Abbaszadeh, UoA, NZ

Planning

INTERFACE - Th 5:00pm-6:30pm, Format: 4x20 min

Room: SIGALAS Building: C, 2nd floor, Zone: 2

CONTRIBUTED SESSION 389

Chair: Jeanjean Antoine, Recommerce Group, FR

Mixed-integer optimization with differential equations

Optimal Control Problems with Discrete Switches

MINLP - Fr 8:30am-10:30am, Format: 3x30 min

Room: Salle 34 Building: B, 1st floor, Zone: 3

INVITED SESSION 102

Organizer: Christian Kirches, TU Braunschweig, DE

Outer Convexification and Mixed-Integer Optimal Control

MINLP - Fr 3:15pm-4:45pm, Format: 3x30 min

Room: Salle 39 Building: E, 3rd floor, Zone: 1

INVITED SESSION 103

Organizer: Sebastian Sager, University Magdeburg, DE

Mixed-Integer PDE-Constrained Optimization

MINLP - Fr 5:00pm-6:30pm, Format: 3x30 min
Room: DURKHEIM Building: A, 3rd floor, Zone: 1
INVITED SESSION 63
Organizer: Sven Leyffer, Argonne National Laboratory, US

Convexification and more

Convexification and more (I)

MINLP - Th 3:15pm-4:45pm, Format: 3x30 min
Room: Salle 39 Building: E, 3rd floor, Zone: 1
INVITED SESSION 62
Organizer: Jon Lee, University of Michigan, US

Convexification and more (II)

MINLP - Th 5:00pm-6:30pm, Format: 3x30 min
Room: DURKHEIM Building: A, 3rd floor, Zone: 1
INVITED SESSION 106
Organizer: Akshay Gupte, Clemson University, US

MIP under Uncertainty

MIP under Uncertainty 1

IPTHEORY - Tu 8:30am-10:30am, Format: 3x30 min
Room: Salle 34 Building: B, 1st floor, Zone: 3
INVITED SESSION 231
Organizer: Fatma Kilinc-Karzan, Carnegie Mellon University, US

MIP under Uncertainty 2

IPTHEORY - Tu 3:15pm-4:45pm, Format: 3x30 min
Room: Salle 43 Building: C, 3rd floor, Zone: 1
INVITED SESSION 232
Organizer: Simge Kucukyavuz, University of Washington, US

Decomposition for multistage stochastic problems

Theoretical and practical aspects of decomposition algorithms for multistage stochastic problems: 1

STOCH - Th 3:15pm-4:45pm, Format: 3x30 min
Room: Salle 32 Building: B, Ground Floor, Zone: 5
INVITED SESSION 246
Organizer: Vincent Leclère, ENPC, FR

Theoretical and practical aspects of decomposition algorithms for multistage stochastic problems: 2

STOCH - Th 5:00pm-6:30pm, Format: 4x20 min
Room: Salle 32 Building: B, Ground Floor, Zone: 5
INVITED SESSION 247
Organizer: Vincent Leclère, ENPC, FR

Theoretical and practical aspects of decomposition algorithms for multistage stochastic problems: 3

STOCH - Fr 8:30am-10:30am, Format: 4x30 min
Room: DENIGES Building: C, Ground Floor, Zone: 5
INVITED SESSION 245
Organizer: Vincent Leclère, ENPC, FR

First-order methods for large-scale convex problems

First-order methods for large-scale convex problems

LEARNING - Th 8:30am-10:30am, Format: 4x30 min

Room: FABRE Building: J, Ground Floor, Zone: 8

INVITED SESSION 316

Organizer: Stephen Vavasis, University of Waterloo, CA

First-order methods for large-scale convex problems II

LEARNING - Th 5:00pm-6:30pm, Format: 4x20 min

Room: FABRE Building: J, Ground Floor, Zone: 8

INVITED SESSION 318

Organizer: Stephen Vavasis, University of Waterloo, CA

Advances in MINLP

MINLP (I)

MINLP - We 8:30am-10:30am, Format: 3x30 min

Room: Salle 34 Building: B, 1st floor, Zone: 3

INVITED SESSION 65

Organizer: Daniel Bienstock, Columbia University, US

MINLP (II)

MINLP - We 3:15pm-4:45pm, Format: 3x30 min

Room: Salle 34 Building: B, 1st floor, Zone: 3

INVITED SESSION 66

Organizer: Daniel Bienstock, Columbia University, US

MINLP (III)

MINLP - We 5:00pm-6:30pm, Format: 3x30 min

Room: DURKHEIM Building: A, 3rd floor, Zone: 1

INVITED SESSION 67

Organizer: Daniel Bienstock, Columbia University, US

Efficient Methods for Piecewise Algorithmic Differentiation

Numerically Efficient Methods for Piecewise Algorithmic Differentiation I

ALGO - We 8:30am-10:30am, Format: 4x30 min

Room: Salle 22 Building: G, 2nd floor, Zone: 6

INVITED SESSION 269

Organizer: Torsten Bosse, FSU Jena, DE

Numerically Efficient Methods for Piecewise Algorithmic Differentiation II

ALGO - Th 8:30am-10:30am, Format: 4x30 min

Room: Salle 22 Building: G, 2nd floor, Zone: 6

INVITED SESSION 270

Organizer: Torsten Bosse, FSU Jena, DE

Progress in Conic and MIP Solvers

Progress in MIP Solvers I

ALGO - We 8:30am-10:30am, Format: 3x30 min

Room: PITRES Building: O, Ground Floor, Zone: 8

INVITED SESSION 235

Organizer: Michael Winkler, Gurobi, DE

Progress in Conic and MIP Solvers

ALGO - We 3:15pm-4:45pm, Format: 3x30 min

Room: PITRES Building: O, Ground Floor, Zone: 8

INVITED SESSION 237

Organizer: Imre Polik, SAS Institute, US

Progress in MIP Solvers II

ALGO - We 5:00pm-6:30pm, Format: 3x30 min
Room: PITRES Building: O, Ground Floor, Zone: 8
INVITED SESSION 234
Organizer: Hans Mittelmann, Arizona State University, US

Computational Integer Programming

Computational Integer Programming I

ALGO - Fr 3:15pm-4:45pm, Format: 3x30 min
Room: PITRES Building: O, Ground Floor, Zone: 8
INVITED SESSION 273
Organizer: Domenico Salvagnin, University of Padova, IT

Computational Integer Programming II

ALGO - Fr 5:00pm-6:30pm, Format: 3x30 min
Room: PITRES Building: O, Ground Floor, Zone: 8
INVITED SESSION 274
Organizer: Domenico Salvagnin, University of Padova, IT

Interior-point methods for large-scale problems

Implementation of interior-point methods for large-scale problems and applications I

ALGO - Mo 3:15pm-4:45pm, Format: 2x30 min
Room: Salle 22 Building: G, 2nd floor, Zone: 6
INVITED SESSION 353
Organizer: Jordi Castro, Univ. Politècnica de Catalunya, ES

Implementation of interior-point methods for large-scale problems and applications II

ALGO - Mo 5:00pm-6:30pm, Format: 3x30 min
Room: PITRES Building: O, Ground Floor, Zone: 8
INVITED SESSION 352
Organizer: Jordi Castro, Univ. Politècnica de Catalunya, ES

High-Performance Computing in Optimization

High-Performance Computing in Optimization I

ALGO - Th 8:30am-10:30am, Format: 3x30 min
Room: Salle 18 Building: I, 1st floor, Zone: 7
INVITED SESSION 271
Organizer: Kibaek Kim, ANL, US

High-Performance Computing in Optimization II

ALGO - Th 3:15pm-4:45pm, Format: 3x30 min
Room: Salle 22 Building: G, 2nd floor, Zone: 6
CONTRIBUTED SESSION 466
Chair: Joaquim Dias Garcia, PSR and PUC-Rio, BR

MINLP methods in gas transport optimization

MINLP methods in gas transport optimization (I)

MINLP - Mo 3:15pm-4:45pm, Format: 3x30 min
Room: Salle 35 Building: B, Intermediate, Zone: 4
INVITED SESSION 162
Organizer: Lars Schewe, FAU, DE

MINLP methods in gas transport optimization (II)

MINLP - Mo 5:00pm-6:30pm, Format: 3x30 min

Room: Salle 35 Building: B, Intermediate, Zone: 4

INVITED SESSION 163

Organizer: Lars Schewe, FAU, DE

Parallel Sessions

Monday 02

CLUSTER: Discrete Optimization & Integer Programming

Stream	8:30-10:30 AM	3:15-4:45 PM	5:00-6:30 PM
IPtheory		Salle 43 Bld C, 3rd floor <u>Z</u> 1 <u>F</u> 3x30 min Provable guarantees for Cut Generating Functions Organizer: Amitabh Basu, session 220	Salle 34 Bld B, 1st floor <u>Z</u> 3 <u>F</u> 3x30 min Lattice methods in Integer Optimisation Organizer: Iskander Aliev, session 78
IPpractice		Salle 44 Bld C, 3rd floor <u>Z</u> 1 <u>F</u> 3x30 min IP Practice I Chair: Maurice Queyranne, session 506	Salle 44 Bld C, 3rd floor <u>Z</u> 1 <u>F</u> 4x20 min Data Mining Chair: Marcus Poggi, session 504
IPpractice			Salle 36 Bld B, Intermediate <u>Z</u> 4 <u>F</u> 4x20 min IP Practice II Chair: Petra Bartmeyer, session 508
MINLP		Salle 39 Bld E, 3rd floor <u>Z</u> 1 <u>F</u> 3x30 min Exact Optimization Algorithms for Compressed Sensing Organizer: Marc Pfetsch, session 56	DURKHEIM Bld A, 3rd floor <u>Z</u> 1 <u>F</u> 3x30 min Mixed-Integer Conic Optimization Organizer: Sven Wiese, session 57
MINLP		Salle 34 Bld B, 1st floor <u>Z</u> 3 <u>F</u> 3x30 min Tight relaxations in nonconvex MINLP Organizer: Ambros Gleixner, session 128	Salle 39 Bld E, 3rd floor <u>Z</u> 1 <u>F</u> 3x30 min Polynomial optimization in binary variables Organizer: Elisabeth Rodriguez-Heck, session 58
MINLP		Salle 35 Bld B, Intermediate <u>Z</u> 4 <u>F</u> 3x30 min MINLP methods in gas transport optimization (I) Organizer: Lars Schewe, session 162	Salle 35 Bld B, Intermediate <u>Z</u> 4 <u>F</u> 3x30 min MINLP methods in gas transport optimization (II) Organizer: Lars Schewe, session 163
APPROX		LEYTEIRE Bld E, 3rd floor <u>Z</u> 1 <u>F</u> 3x30 min Geometry of Polynomials and Applications in Approximate Counting Organizer: Shayan Oveis Gharan, session 99	LEYTEIRE Bld E, 3rd floor <u>Z</u> 1 <u>F</u> 3x30 min Scheduling and File Migration Chair: Asaf Levin, session 345
APPROX		Salle 36 Bld B, Intermediate <u>Z</u> 4 <u>F</u> 3x30 min Matching and Matroids Organizer: José Soto, session 341	Salle 43 Bld C, 3rd floor <u>Z</u> 1 <u>F</u> 4x20 min Algorithms for matching markets Organizer: Amin Saberi, session 467
COMB		SIGALAS Bld C, 2nd floor <u>Z</u> 2 <u>F</u> 3x30 min On the Tree Augmentation Problem Organizer: Laura Sanità, session 240	SIGALAS Bld C, 2nd floor <u>Z</u> 2 <u>F</u> 4x20 min Combinatorial optimization and convexity Chair: Yu Yokoi, session 424
COMB		Salle 41 Bld C, 3rd floor <u>Z</u> 1 <u>F</u> 3x30 min Scheduling with setup, uncertainty and precedences Organizer: Monaldo Mastrolilli, session 419	Salle 41 Bld C, 3rd floor <u>Z</u> 1 <u>F</u> 4x20 min Practical aspects of network optimization Chair: Kai Hoppmann, session 427
CP		DURKHEIM Bld A, 3rd floor <u>Z</u> 1 <u>F</u> 3x30 min Global Optimization Organizer: Hassan Hijazi, session 299	

Monday 02

CLUSTER: Optimization under Uncertainty

Stream	8:30-10:30 AM	3:15-4:45 PM	5:00-6:30 PM
Stoch		Salle 32 <u>Bld B</u> , Ground Floor <u>Z 5 F</u> 3x30 min Scenario discretization techniques in stochastic optimization Organizer: Fabian Bastin, session 287	Salle 32 <u>Bld B</u> , Ground Floor <u>Z 5 F</u> 3x30 min Distributionally Robust Stochastic Programming: Theory and Applications Organizer: Ran Ji, session 250
Stoch			Salle 30 <u>Bld B</u> , Ground Floor <u>Z 5 F</u> 3x20 min Differentiability, convexity, and modeling in stochastic optimization Chair: Kai Spuerkel, session 493
Robust		DENIGES <u>Bld C</u> , Ground Floor <u>Z 5 F</u> 3x30 min Preference robust optimization Organizer: Erick Delage, session 166	DENIGES <u>Bld C</u> , Ground Floor <u>Z 5 F</u> 3x30 min Advances in Adjustable Robust Optimization Organizer: Do Young Yoon, session 350
Robust		Salle 33 <u>Bld B</u> , Ground Floor <u>Z 5 F</u> 3x30 min Distributionally Robust Optimization - New Theory and Applications Organizer: Zhichao Zheng, session 356	Salle 37 <u>Bld B</u> , Intermediate <u>Z 4 F</u> 3x20 min New models in robust optimization Chair: Juan Borrero, session 459
Markov		Salle 31 <u>Bld B</u> , Ground Floor <u>Z 5 F</u> 3x30 min Approximate dynamic programming Organizer: David Brown, session 159	Salle 31 <u>Bld B</u> , Ground Floor <u>Z 5 F</u> 2x30 min Learning and dynamic programming Chair: Boxiao Chen, session 381
Game		Salle 30 <u>Bld B</u> , Ground Floor <u>Z 5 F</u> 3x30 min Risk and Energy Markets Chair: Julio Deride, session 376	

Monday 02

CLUSTER: Continuous Optimization

Stream	8:30-10:30 AM	3:15-4:45 PM	5:00-6:30 PM
NLP		GINTRAC Bld Q, Ground Floor \underline{Z} 8 \underline{F} 3x30 min Polynomial and tensor optimization I Organizer: Jiawang Nie, session 5	GINTRAC Bld Q, Ground Floor \underline{Z} 8 \underline{F} 3x30 min Gradient Methods for Constrained Optimization Problems Organizer: Igor Konnov, session 4
NLP		Salle 05 Bld Q, 1st floor \underline{Z} 11 \underline{F} 3x30 min Convex regularization and inverse problems Organizer: Pierre Weiss, session 216	Salle 05 Bld Q, 1st floor \underline{Z} 11 \underline{F} 4x20 min Polynomial and tensor optimization III Organizer: Jiawang Nie, session 7
NLP		Salle KC7 Bld K, Intermediate 2 \underline{Z} 10 \underline{F} 3x30 min Sparse Recovery Chair: Mustafa Pinar, session 432	Salle 9 Bld N, 4th floor \underline{Z} 12 \underline{F} 3x20 min Modeling in NLP Chair: Laura Balzano, session 433
NonSmooth		Salle 8 Bld N, 4th floor \underline{Z} 12 \underline{F} 3x30 min Nonconvex Optimization: Theory and Methods - Part 1 Organizer: Shoham Sabach, session 184	Salle 8 Bld N, 4th floor \underline{Z} 12 \underline{F} 3x30 min Extending the Reach of First-Order Methods, Part I Organizer: Haihao Lu, session 285
NonSmooth		Salle 9 Bld N, 4th floor \underline{Z} 12 \underline{F} 2x30 min Adaptivity in non smooth optimization Organizer: Masaru Ito, session 558	
SDP		Salle 20 Bld G, 1st floor \underline{Z} 6 \underline{F} 3x30 min Using SDP relaxations and solving them faster Organizer: Elisabeth Gaar, session 113	Salle 20 Bld G, 1st floor \underline{Z} 6 \underline{F} 3x30 min Solving large scale convex composite programming Organizer: Kim-Chuan Toh, session 130
SDP		Salle LC5 Bld L, Intermediate 1 \underline{Z} 10 \underline{F} 3x30 min Algorithms for nonlinear conic problems Chair: Takayuki Okuno, session 463	Salle LC5 Bld L, Intermediate 1 \underline{Z} 10 \underline{F} 3x30 min Convergence and Approximation in Conic Programming Chair: Tamás Terlaky, session 465
Variat		Salle 06 Bld Q, 1st floor \underline{Z} 11 \underline{F} 3x30 min Proximal Methods for Structured Problems Organizer: Ting Kei Pong, session 147	Salle 06 Bld Q, 1st floor \underline{Z} 11 \underline{F} 4x20 min Nonlinear Optimization and Variational Inequalities VI Organizer: Cong Sun, session 146
Variat		Salle ARNOZAN Bld Q, Ground Floor \underline{Z} 8 \underline{F} 3x30 min Algorithms for optimization and variational problems with possibly nonisolated solutions I Organizer: Andreas Fischer, session 152	Salle ARNOZAN Bld Q, Ground Floor \underline{Z} 8 \underline{F} 4x20 min Variational Analysis 4 Organizer: Jo Brueggemann, session 370
RandomM		Salle KC6 Bld K, Intermediate 1 \underline{Z} 10 \underline{F} 3x30 min Coordinate Descent and Randomized Direct Search Methods Organizer: Martin Takac, session 211	Salle KC6 Bld K, Intermediate 1 \underline{Z} 10 \underline{F} 3x20 min Complexity of Randomized Algorithms Organizer: Raghu Pasupathy, session 347
DerFree		Salle 21 Bld G, Intermediate \underline{Z} 6 \underline{F} 3x30 min Mixed-integer derivative-free optimization Chair: Clément Royer, session 80	Salle 21 Bld G, Intermediate \underline{Z} 6 \underline{F} 3x30 min Advances in DFO I Chair: Sébastien Le Digabel, session 40
Control		Salle AURIAC Bld G, 1st floor \underline{Z} 6 \underline{F} 3x30 min Theory and Methods for ODE- and PDE-Constrained Optimization 1 Chair: Carl Greiff, session 331	Salle AURIAC Bld G, 1st floor \underline{Z} 6 \underline{F} 4x20 min Advances in optimization methods for time dependent problems:I Organizer: Matthias Heinkenschloss, session 223

Monday 02

CLUSTER: Specific Models, Algorithms, and Software

Stream	8:30-10:30 AM	3:15-4:45 PM	5:00-6:30 PM
Learning		FABRE <u>Bld J</u> , Ground Floor <u>Z 8 F</u> 3x30 min Distributed Optimization Organizer: Franck lutzeler, session 325	FABRE <u>Bld J</u> , Ground Floor <u>Z 8 F</u> 4x20 min Riemannian geometry in optimization for learning Organizer: Nicolas Boumal, session 320
Learning		Salle 16 <u>Bld I</u> , 2nd floor <u>Z 7 F</u> 3x30 min Decisions and learning from data Chair: Christopher McCord, session 481	Salle DENUCE <u>Bld Q</u> , Ground Floor <u>Z 8 F</u> 4x20 min Exploiting structure in constrained optimization Organizer: Mihai Cucuringu, session 334
Learning			Salle 22 <u>Bld G</u> , 2nd floor <u>Z 6 F</u> 4x20 min Sparsity, variable selection and efficient algorithms Chair: Alex Sholokhov, session 475
Logistics		PITRES <u>Bld O</u> , Ground Floor <u>Z 8 F</u> 3x30 min Facility Layout Chair: Anders Gullhav, session 450	Salle 16 <u>Bld I</u> , 2nd floor <u>Z 7 F</u> 3x20 min Packing and Capacity Management Chair: Eugene Zak, session 452
Scheduling		Salle 23 <u>Bld G</u> , 3rd floor <u>Z 6 F</u> 3x30 min Combinatorial Optimization in Chip Design Organizer: Stefan Hougardy, session 257	Salle 18 <u>Bld I</u> , 1st floor <u>Z 7 F</u> 4x20 min Manufacturing Chair: Younsoo Lee, session 530
Energy		Salle DENUCE <u>Bld Q</u> , Ground Floor <u>Z 8 F</u> 3x30 min Progress in Algorithms for Optimal Power Flow Problems I Organizer: Miguel Anjos, session 8	Salle 23 <u>Bld G</u> , 3rd floor <u>Z 6 F</u> 3x30 min Novel data-driven OR techniques for power system operations and planning Organizer: Juan Morales, session 52
Energy		Salle 24 <u>Bld G</u> , 3rd floor <u>Z 6 F</u> 3x30 min Topics in power systems Organizer: Alberto Lamadrid, session 438	Salle 24 <u>Bld G</u> , 3rd floor <u>Z 6 F</u> 3x30 min Structure and Learning in Power Grid Optimization Organizer: Deepjyoti Deka, session 135
Sciences		Salle LA4 <u>Bld L</u> , Basement <u>Z 8 F</u> 3x30 min Portfolio Optimization Chair: Bernardo Pagnoncelli, session 393	Salle LA4 <u>Bld L</u> , Basement <u>Z 8 F</u> 3x30 min Structure from evidence Organizer: Peter Gritzmann, session 386
Algo		Salle 22 <u>Bld G</u> , 2nd floor <u>Z 6 F</u> 2x30 min Implementation of interior-point methods for large-scale problems and applications I Organizer: Jordi Castro, session 353	PITRES <u>Bld O</u> , Ground Floor <u>Z 8 F</u> 3x30 min Implementation of interior-point methods for large-scale problems and applications II Organizer: Jordi Castro, session 352
Algo		Salle 18 <u>Bld I</u> , 1st floor <u>Z 7 F</u> 3x30 min Advances in Linear, Non Linear and Mixed-Integer Optimization Chair: Hiroshige Dan, session 400	

Tuesday 03

CLUSTER: Discrete Optimization & Integer Programming

Stream	8:30-10:30 AM	3:15-4:45 PM	5:00-6:30 PM
IPtheory	Salle 43 Bld C, 3rd floor \underline{Z} 1 \underline{F} 4x30 min Extended formulations Organizer: Stefan Weltge, session 219	Salle 43 Bld C, 3rd floor \underline{Z} 1 \underline{F} 3x30 min MIP under Uncertainty 2 Organizer: Simge Kucukyavuz, session 232	
IPtheory	Salle 34 Bld B, 1st floor \underline{Z} 3 \underline{F} 3x30 min MIP under Uncertainty 1 Organizer: Fatma Kilinc-Karzan, session 231		
IPtheory	Salle 35 Bld B, Intermediate \underline{Z} 4 \underline{F} 4x30 min Cutting Planes for Integer Programs Chair: Matthias Köppe, session 512		
IPpractice	Salle 44 Bld C, 3rd floor \underline{Z} 1 \underline{F} 4x30 min Machine Learning for Optimization Organizer: Bistra Dilkina, session 138	Salle 44 Bld C, 3rd floor \underline{Z} 1 \underline{F} 3x30 min Symmetry Handling in Integer Programs Organizer: Christopher Hojny, session 129	
MINLP		DURKHEIM Bld A, 3rd floor \underline{Z} 1 \underline{F} 3x30 min Applications in Mixed-Integer Quadratic Programming Organizer: Boshi Yang, session 107	
MINLP		Salle 34 Bld B, 1st floor \underline{Z} 3 \underline{F} 3x30 min Convex relaxations in MINLP Organizer: Adam Letchford, session 278	
MINLP		Salle 35 Bld B, Intermediate \underline{Z} 4 \underline{F} 3x30 min Applications of MINLP Organizer: Dolores Romero Morales, session 281	
APPROX	LEYTEIRE Bld E, 3rd floor \underline{Z} 1 \underline{F} 4x30 min Streaming Organizer: Michael Kapralov, session 228	LEYTEIRE Bld E, 3rd floor \underline{Z} 1 \underline{F} 3x30 min Algorithms in the Sharing Economy Organizer: David Shmoys, session 22	
APPROX	Salle 36 Bld B, Intermediate \underline{Z} 4 \underline{F} 4x30 min Approximation Algorithms for Clustering Organizer: Chaitanya Swamy, session 256	Salle 36 Bld B, Intermediate \underline{Z} 4 \underline{F} 3x30 min Local Search and Facility Location Organizer: Felix Willamowski, session 342	
COMB	SIGALAS Bld C, 2nd floor \underline{Z} 2 \underline{F} 4x30 min Matching games and beyond Organizer: Jochen Koenemann, session 241	Salle 41 Bld C, 3rd floor \underline{Z} 1 \underline{F} 3x30 min New developments in prophet inequalities and related settings Organizer: Ruben Hoeksma, session 258	
COMB	Salle 41 Bld C, 3rd floor \underline{Z} 1 \underline{F} 4x30 min Equilibrium Computation in Congestion Games Organizer: Umang Bhaskar, session 242	Salle 39 Bld E, 3rd floor \underline{Z} 1 \underline{F} 3x30 min Submodular optimization and beyond Chair: Satoru Iwata, session 418	
COMB	Salle 39 Bld E, 3rd floor \underline{Z} 1 \underline{F} 4x30 min Exact approaches for problems over lattices and graphs Chair: Daniele Catanzaro, session 425		
CP	DURKHEIM Bld A, 3rd floor \underline{Z} 1 \underline{F} 4x30 min Graphical Optimization Model 1 Organizer: Joris Kinable, session 295		

Tuesday 03

CLUSTER: Optimization under Uncertainty

Stream	8:30-10:30 AM	3:15-4:45 PM	5:00-6:30 PM
Stoch	DENIGES Bld C, Ground Floor \underline{Z} 5 \underline{F} 4x30 min Risk-averse stochastic programming Organizer: Andrzej Ruszczyński, session 252	Salle 32 Bld B, Ground Floor \underline{Z} 5 \underline{F} 3x30 min Distributionally Robust and Stochastic Optimization: A Sampling/Scenario Perspective Organizer: Guzin Bayraksan, session 249	
Robust	Salle 37 Bld B, Intermediate \underline{Z} 4 \underline{F} 3x30 min Nonlinear Optimization with Uncertain Constraints Organizer: Charlie Vanaret, session 110	Salle 33 Bld B, Ground Floor \underline{Z} 5 \underline{F} 3x30 min Recent Advances in Robust Optimization I Organizer: Phebe Vayanos, session 442	
Robust	Salle 33 Bld B, Ground Floor \underline{Z} 5 \underline{F} 3x30 min Robust Optimization and Operations Management Organizer: Chaithanya Bandi, session 410	DENIGES Bld C, Ground Floor \underline{Z} 5 \underline{F} 3x30 min Recent Advances in Robust Optimization II Organizer: Wolfram Wiesemann, session 445	
Markov	Salle 31 Bld B, Ground Floor \underline{Z} 5 \underline{F} 4x30 min Algorithms for stochastic games : new approaches Organizer: Hugo Gimbert, session 137	Salle 31 Bld B, Ground Floor \underline{Z} 5 \underline{F} 3x30 min Market places and dynamic programming Chair: Dan Iancu, session 380	
Game	Salle 30 Bld B, Ground Floor \underline{Z} 5 \underline{F} 4x30 min Algorithmic Game Theory I Organizer: Luce Brotcorne, session 311	Salle 30 Bld B, Ground Floor \underline{Z} 5 \underline{F} 3x30 min Game Theory and Energy Markets Chair: Didier Aussel, session 375	

Tuesday 03

CLUSTER: Continuous Optimization

Stream	8:30-10:30 AM	3:15-4:45 PM	5:00-6:30 PM
NLP	GINTRAC Bld Q, Ground Floor Z 8 F 4x30 min Stochastic and Nonlinear Optimization I Organizer: Jorge Nocedal, session 47	GINTRAC Bld Q, Ground Floor Z 8 F 3x30 min Sum-of-squares and moment problems: methods and applications Organizer: Etienne De Klerk, session 2	
NLP	Salle 05 Bld Q, 1st floor Z 11 F 4x30 min Machine learning and sparse optimisation Organizer: Coralia Cartis, session 109	Salle KC7 Bld K, Intermediate 2 Z 10 F 3x30 min Bridging NLP and Theoretical Computer Science Organizer: Aleksander Madry, session 51	
NLP	Salle KC7 Bld K, Intermediate 2 Z 10 F 4x30 min Unconstrained Optimization Chair: Ekkehard Sachs, session 401	Salle 05 Bld Q, 1st floor Z 11 F 2x30 min Interior Point Methods in Engineering Applications II Organizer: Jacek Gondzio, session 61	
NLP		Salle 9 Bld N, 4th floor Z 12 F 3x30 min Linear Optimization III Chair: Rodrigo Mendoza Smith, session 439	
NonSmooth	Salle LC4 Bld L, Intermediate 1 Z 9 F 4x30 min Advances in Bundle Methods for Convex Optimization Organizer: Christoph Helmberg, session 93	Salle 8 Bld N, 4th floor Z 12 F 3x30 min Nonconvex Optimization: Theory and Methods - Part 2 Organizer: Russell Luke, session 186	
NonSmooth	Salle 8 Bld N, 4th floor Z 12 F 4x30 min Addressing problems with complex geometries Organizer: Edouard Pauwels, session 229		
SDP	Salle 20 Bld G, 1st floor Z 6 F 4x30 min Algebraic and geometric aspects of semidefinite programming Organizer: Hamza Fawzi, session 85	Salle 20 Bld G, 1st floor Z 6 F 3x30 min Recent Advances in Conic Programming I Organizer: Makoto Yamashita, session 82	
SDP	Salle LC5 Bld L, Intermediate 1 Z 10 F 4x30 min Theory and algorithms in conic linear programming 1 Organizer: Gabor Pataki, session 88	Salle LC5 Bld L, Intermediate 1 Z 10 F 3x30 min Relative Entropy Optimization II Organizer: Venkat Chandrasekaran, session 112	
Variat	Salle 06 Bld Q, 1st floor Z 11 F 4x30 min Nonlinear Optimization and Variational Inequalities V Organizer: Xin Liu, session 145	Salle 06 Bld Q, 1st floor Z 11 F 3x30 min Nonlinear Optimization and Variational Inequalities III Organizer: Xin Liu, session 143	
Variat	Salle ARNOZAN Bld Q, Ground Floor Z 8 F 4x30 min Optimization Algorithms and Variational Inequalities I Organizer: Bo Jiang, session 148		
RandomM	Salle KC6 Bld K, Intermediate 1 Z 10 F 4x30 min Larges Scale and Distributed Optimization Organizer: Ermin Wei, session 214	Salle KC6 Bld K, Intermediate 1 Z 10 F 3x30 min Recent Advances in Stochastic and Non-convex Optimization II Organizer: Mingyi Hong, session 304	
DerFree	Salle 21 Bld G, Intermediate Z 6 F 4x30 min Bayesian and Randomized Optimization II Chair: Youssef Diouane, session 79	Salle 21 Bld G, Intermediate Z 6 F 3x30 min Advances in DFO II Chair: Warren Hare, session 37	
Control	Salle AURIAC Bld G, 1st floor Z 6 F 4x30 min Optimization Methods for PDE Constrained Problems Organizer: Michael Ulbrich, session 221	Salle AURIAC Bld G, 1st floor Z 6 F 3x30 min Optimal Control and PDE Constrained Optimization Organizer: Hasnaa Zidani, session 233	

Tuesday 03

CLUSTER: Specific Models, Algorithms, and Software

Stream	8:30-10:30 AM	3:15-4:45 PM	5:00-6:30 PM
Learning	FABRE Bld J, Ground Floor Z 8 F 4x30 min Optimization in Statistical Learning Organizer: Quentin Berthet, session 326	Salle 16 Bld I, 2nd floor Z 7 F 3x30 min Distributed and Asynchronous Learning Organizer: Ion Necoara, session 323	
Learning	Salle DENUCE Bld Q, Ground Floor Z 8 F 4x30 min Statistics meets optimization: going beyond convexity Organizer: John Duchi, session 337	FABRE Bld J, Ground Floor Z 8 F 3x30 min Advances in large-scale machine learning Organizer: Mark Schmidt, session 327	
Learning	Salle 22 Bld G, 2nd floor Z 6 F 4x30 min Pricing Chair: Anastasiya Ivanova, session 478	Salle 22 Bld G, 2nd floor Z 6 F 2x30 min Learning for mixed integer optimization Chair: Hari Bandi, session 482	
Network	Salle 18 Bld I, 1st floor Z 7 F 4x30 min Path and tree problems Chair: Arthur Delarue, session 360		
Logistics	Salle 16 Bld I, 2nd floor Z 7 F 3x30 min Facility Location Chair: Ivan Contreras, session 414	PITRES Bld O, Ground Floor Z 8 F 3x30 min Pricing Methods Organizer: Rafael Martinelli, session 182	
Scheduling		Salle 23 Bld G, 3rd floor Z 6 F 3x30 min Supply Chain and Lot Sizing Chair: Simon Thevenin, session 534	
Energy	Salle 23 Bld G, 3rd floor Z 6 F 4x30 min Electric Vehicles and Decarbonization Chair: Martim Joyce-Moniz, session 519	Salle DENUCE Bld Q, Ground Floor Z 8 F 3x30 min Equilibrium Modelling in Energy Organizer: Thomas Kallabis, session 290	
Energy	Salle 24 Bld G, 3rd floor Z 6 F 4x30 min Risk Models for Electricity Markets Chair: Michael Ferris, session 521	Salle 24 Bld G, 3rd floor Z 6 F 3x30 min Optimization Models for Renewable Energy Integration 2 Chair: Michel Denault, session 523	
Sciences	Salle LA4 Bld L, Basement Z 8 F 4x30 min Interval Global Optimization Organizer: Frederic Messine, session 339	Salle LA4 Bld L, Basement Z 8 F 3x30 min Optimization in Medicine Organizer: Sebastian Sager, session 394	
Algo	PITRES Bld O, Ground Floor Z 8 F 4x30 min LP, Mixed Integer Convex Programming and Decomposition Organizer: Thorsten Koch, session 236	Salle 18 Bld I, 1st floor Z 7 F 3x30 min Optimization software and applications Chair: Bartolomeo Stellato, session 399	

Wednesday 04

CLUSTER: Discrete Optimization & Integer Programming

Stream	8:30-10:30 AM	3:15-4:45 PM	5:00-6:30 PM
IPtheory	Salle 43 Bld C, 3rd floor Z 1 F 4x30 min Determinantal structures of IPs Organizer: Martin Henk, session 131		Salle 43 Bld C, 3rd floor Z 1 F 2x30 min IP-Formulations Chair: Temitayo Ajayi, session 516
IPtheory	Salle 35 Bld B, Intermediate Z 4 F 4x30 min Advances in Integer Programming Organizer: Santanu Dey, session 230		
IPtheory	Salle 42 Bld C, 3rd floor Z 1 F 4x30 min Primal Algorithms for Integer Programming Problems Organizer: Daniel Aloise, session 338		
IPpractice	Salle 44 Bld C, 3rd floor Z 1 F 4x30 min Benders Decomposition for Combinatorial and Bilevel Optimization Organizer: Fabio Furini, session 171	Salle 44 Bld C, 3rd floor Z 1 F 3x30 min Knapsack Problems Organizer: Enrico Malaguti, session 185	Salle 44 Bld C, 3rd floor Z 1 F 3x30 min Exact Approaches for Vehicle Routing and Variants Organizer: Ricardo Fukasawa, session 288
IPpractice		Salle 36 Bld B, Intermediate Z 4 F 3x30 min Decomposition I Chair: Dieter Weninger, session 486	
MINLP	Salle 34 Bld B, 1st floor Z 3 F 3x30 min MINLP (I) Organizer: Daniel Bienstock, session 65	DURKHEIM Bld A, 3rd floor Z 1 F 3x30 min Decomposition methods for MINLP Organizer: Ivo Nowak, session 55	DURKHEIM Bld A, 3rd floor Z 1 F 3x30 min MINLP (III) Organizer: Daniel Bienstock, session 67
MINLP		Salle 34 Bld B, 1st floor Z 3 F 3x30 min MINLP (II) Organizer: Daniel Bienstock, session 66	Salle 34 Bld B, 1st floor Z 3 F 3x30 min Robust Approaches for Challenging Uncertain Optimization Problems Organizer: Frauke Liers, session 124
MINLP		Salle 35 Bld B, Intermediate Z 4 F 3x30 min MINLP for Data Science Organizer: Vanesa Guerrero, session 108	Salle 35 Bld B, Intermediate Z 4 F 3x30 min Advances in MINLP Organizer: Laura Palagi, session 165
APPROX	LEYTEIRE Bld E, 3rd floor Z 1 F 4x30 min Approximation Algorithms for the Traveling Salesman Problem Organizer: Anke van Zuylen, session 23	LEYTEIRE Bld E, 3rd floor Z 1 F 3x30 min Clustering Organizer: Mohammad Salavatipour, session 30	LEYTEIRE Bld E, 3rd floor Z 1 F 3x30 min Approximation Algorithms for Geometric Packing Problems Organizer: Fabrizio Grandoni, session 28
APPROX	Salle 36 Bld B, Intermediate Z 4 F 4x30 min Approximation Algorithms for Scheduling Problems Organizer: Nicole Megow, session 72	Salle 43 Bld C, 3rd floor Z 1 F 3x30 min Network Design and Routing Chair: Yuko Kuroki, session 346	Salle 36 Bld B, Intermediate Z 4 F 3x30 min Online Optimization Organizer: Kevin Schewior, session 35
COMB	Salle 41 Bld C, 3rd floor Z 1 F 4x30 min Discrete Convex Analysis Organizer: Akiyoshi Shioura, session 243	Salle 41 Bld C, 3rd floor Z 1 F 3x30 min Variants of the Assignment problem Organizer: Kavitha Telikepalli, session 266	Salle 41 Bld C, 3rd floor Z 1 F 4x20 min Connectivity problems and Steiner trees Chair: Andreas Feldmann, session 421
COMB	Salle 39 Bld E, 3rd floor Z 1 F 4x30 min Optimization under uncertainty Organizer: Marco Molinaro, session 261	Salle 39 Bld E, 3rd floor Z 1 F 3x30 min Polyhedral aspects of combinatorial optimization problems Chair: Guillaume Duvillié, session 404	Salle 39 Bld E, 3rd floor Z 1 F 4x20 min Shortest paths and cutting stock Chair: Arnaud Vandaele, session 426
CP	DURKHEIM Bld A, 3rd floor Z 1 F 4x30 min Learning in CP Organizer: Arnaud Lallouet, session 301		

Wednesday 04

CLUSTER: Optimization under Uncertainty

Stream	8:30-10:30 AM	3:15-4:45 PM	5:00-6:30 PM
Stoch	DENIGES Bld C, Ground Floor \underline{Z} 5 \underline{F} 4x30 min Chance Constraint and Its Applications Organizer: Jianqiang Cheng, session 253	Salle 32 Bld B, Ground Floor \underline{Z} 5 \underline{F} 3x30 min Learning and Stochastic Programming Organizer: Matthias Poloczek, session 254	DENIGES Bld C, Ground Floor \underline{Z} 5 \underline{F} 3x30 min Stochastic Programming and Distributionally Robust Optimization Models with Endogenous Uncertainty Organizer: Miguel Lejeune, session 248
Stoch	Salle 32 Bld B, Ground Floor \underline{Z} 5 \underline{F} 3x30 min Sampling and stability in stochastic optimization Chair: Harsha Honnappa, session 488		Salle 32 Bld B, Ground Floor \underline{Z} 5 \underline{F} 4x20 min Stochastic optimization models and applications Chair: F.-Javier Heredia, session 495
Robust	Salle 37 Bld B, Intermediate \underline{Z} 4 \underline{F} 4x30 min Interfaces of Applied Probability and Optimization Organizer: Omar El Housni, session 409	DENIGES Bld C, Ground Floor \underline{Z} 5 \underline{F} 3x30 min Dynamic Optimization: Theory and Algorithms Organizer: Vineet Goyal, session 100	Salle 37 Bld B, Intermediate \underline{Z} 4 \underline{F} 2x30 min Robust Adaptive Control and Learning Organizer: Siqian Shen, session 97
Robust	Salle 33 Bld B, Ground Floor \underline{Z} 5 \underline{F} 4x30 min Robust combinatorial optimization IV Chair: Arie Koster, session 449	Salle 37 Bld B, Intermediate \underline{Z} 4 \underline{F} 3x30 min Cursing the Dimensionality: Two-Stage and Multi-Stage Robust Optimization Organizer: Angelos Tsoukalas, session 443	Salle 33 Bld B, Ground Floor \underline{Z} 5 \underline{F} 4x20 min Robust combinatorial optimization III Organizer: Moritz Mühlenhaler, session 255
Markov		Salle 31 Bld B, Ground Floor \underline{Z} 5 \underline{F} 2x30 min Dynamic programming applications Chair: Susanne Hoffmeister, session 379	
Game	Salle 30 Bld B, Ground Floor \underline{Z} 5 \underline{F} 4x30 min Risk and Financial Markets Chair: Markku Kallio, session 377	Salle 30 Bld B, Ground Floor \underline{Z} 5 \underline{F} 3x30 min Nonconvex and Complex Problems in Multi-objective Optimization Chair: Gabriele Eichfelder, session 268	Salle 30 Bld B, Ground Floor \underline{Z} 5 \underline{F} 3x30 min Aspects of Multiobjective Combinatorial Optimization Organizer: Matthias Ehrgott, session 87

Wednesday 04

CLUSTER: Continuous Optimization

Stream	8:30-10:30 AM	3:15-4:45 PM	5:00-6:30 PM
NLP	GINTRAC <u>Bld Q</u> , Ground Floor <u>Z 8 F</u> 4x30 min Stochastic and Nonlinear Optimization III Organizer: Jorge Nocedal, session 31	GINTRAC <u>Bld Q</u> , Ground Floor <u>Z 8 F</u> 3x30 min The power and limits of the Lasserre hierarchy Organizer: Markus Schweighofer, session 9	GINTRAC <u>Bld Q</u> , Ground Floor <u>Z 8 F</u> 3x30 min Software for Nonlinear Optimization Organizer: Sven Leyffer, session 133
NLP	Salle 05 <u>Bld Q</u> , 1st floor <u>Z 11 F</u> 4x30 min Optimality conditions in NLP and conic problems Organizer: Roberto Andreani, session 43	Salle 05 <u>Bld Q</u> , 1st floor <u>Z 11 F</u> 3x30 min Subspace methods in NLP I Organizer: Michal Kocvara, session 45	Salle 05 <u>Bld Q</u> , 1st floor <u>Z 11 F</u> 3x30 min Conjugate Gradient Methods Chair: Giovanni Fasano, session 362
NLP	Salle KC7 <u>Bld K</u> , Intermediate 2 <u>Z 10 F</u> 4x30 min Computational advances in NLP Chair: Jeffrey Pang, session 434	Salle 9 <u>Bld N</u> , 4th floor <u>Z 12 F</u> 3x30 min Quadratic Optimization Chair: Anders Forsgren, session 417	Salle 9 <u>Bld N</u> , 4th floor <u>Z 12 F</u> 3x30 min Linear Optimization II Chair: Julian Hall, session 416
NLP	Salle 9 <u>Bld N</u> , 4th floor <u>Z 12 F</u> 4x30 min Fixed Point Approaches Chair: Poom Kumam, session 435		Salle ARNOZAN <u>Bld Q</u> , Ground Floor <u>Z 8 F</u> 3x30 min Interior Point Methods in LP and NLP Chair: Andre Tits, session 430
NonSmooth	Salle LC4 <u>Bld L</u> , Intermediate 1 <u>Z 9 F</u> 4x30 min Recent advances in first-order algorithms for non-smooth optimization Organizer: Thomas Pock, session 198	Salle 8 <u>Bld N</u> , 4th floor <u>Z 12 F</u> 3x30 min Adaptivity in non-smooth optimization Organizer: Volkan Cevher, session 187	Salle 8 <u>Bld N</u> , 4th floor <u>Z 12 F</u> 3x30 min Methods and Analysis for Nonsmooth Optimization Organizer: Michael Overton, session 86
NonSmooth	Salle 8 <u>Bld N</u> , 4th floor <u>Z 12 F</u> 4x30 min Dynamical Systems and Optimization Organizer: Hedy Attouch, session 351		
SDP	Salle AURIAC <u>Bld G</u> , 1st floor <u>Z 6 F</u> 4x30 min Recent Advances in Conic Programming II Organizer: Sena Safarina, session 83	Salle 20 <u>Bld G</u> , 1st floor <u>Z 6 F</u> 3x30 min SDP approaches to combinatorial and global optimization problems Organizer: Etienne De Klerk, session 15	Salle 20 <u>Bld G</u> , 1st floor <u>Z 6 F</u> 3x30 min Noncommutative polynomial optimization: semidefinite relaxations, free convexity and applications to quantum information I Organizer: Monique Laurent, session 20
SDP	Salle 20 <u>Bld G</u> , 1st floor <u>Z 6 F</u> 4x30 min Theory and algorithms in conic linear programming 2 Organizer: Gabor Pataki, session 89	Salle LC5 <u>Bld L</u> , Intermediate 1 <u>Z 10 F</u> 3x30 min Reformulation-based solution methods for quadratic programming Organizer: Dominique Quadri, session 215	Salle LC5 <u>Bld L</u> , Intermediate 1 <u>Z 10 F</u> 4x20 min Completely Positive Cones and Applications Chair: Patrick Groetzner, session 464
SDP	Salle LC5 <u>Bld L</u> , Intermediate 1 <u>Z 10 F</u> 4x30 min New trends II Chair: Frank Permenter, session 500		
Variat	Salle 06 <u>Bld Q</u> , 1st floor <u>Z 11 F</u> 2x30 min Stochastic Optimization and Variational Inequalities II Organizer: Alejandro Jofre, session 156	Salle 06 <u>Bld Q</u> , 1st floor <u>Z 11 F</u> 3x30 min Optimization Algorithms and Variational Inequalities II Organizer: Xiaoqi Yang, session 150	Salle 06 <u>Bld Q</u> , 1st floor <u>Z 11 F</u> 3x30 min Complementarity Problems Organizer: Samir Neogy, session 173
Variat	Salle ARNOZAN <u>Bld Q</u> , Ground Floor <u>Z 8 F</u> 4x30 min Variational Analysis 1 Organizer: Samir Adly, session 364	Salle ARNOZAN <u>Bld Q</u> , Ground Floor <u>Z 8 F</u> 3x30 min Nash equilibrium and games 1 Organizer: Lorenzo Lampariello, session 365	
RandomM	Salle KC6 <u>Bld K</u> , Intermediate 1 <u>Z 10 F</u> 4x30 min First Order Methods for Non-Smooth Constrained Optimization Organizer: Qihang Lin, session 305	Salle KC6 <u>Bld K</u> , Intermediate 1 <u>Z 10 F</u> 3x30 min Fast Converging Stochastic Optimization Algorithms Organizer: Francis Bach, session 213	Salle KC6 <u>Bld K</u> , Intermediate 1 <u>Z 10 F</u> 4x20 min Non-Convex and Second-order Methods in Machine Learning Organizer: Martin Takac, session 33
DerFree	Salle 21 <u>Bld G</u> , Intermediate <u>Z 6 F</u> 4x30 min New derivative-free algorithms Chair: Margherita Porcelli, session 34	Salle 21 <u>Bld G</u> , Intermediate <u>Z 6 F</u> 3x30 min Surrogate-based algorithms for constrained derivative-free problems Chair: Phillippe Sampaio, session 126	Salle 21 <u>Bld G</u> , Intermediate <u>Z 6 F</u> 3x30 min Progress in methods and theory of derivative-free optimization Chair: Serge Gratton, session 42
Control		Salle AURIAC <u>Bld G</u> , 1st floor <u>Z 6 F</u> 3x30 min Risk-Averse PDE-Constrained Optimization- Methods and Applications Organizer: Harbir Antil, session 222	Salle AURIAC <u>Bld G</u> , 1st floor <u>Z 6 F</u> 4x20 min Advances in optimization methods for time dependent problems II Organizer: Denis Ridzal, session 225

Wednesday 04

CLUSTER: Specific Models, Algorithms, and Software

Stream	8:30-10:30 AM	3:15-4:45 PM	5:00-6:30 PM
Learning	Salle 16 Bld I, 2nd floor Z 7 F 3x30 min First-Order Methods for Machine Learning Organizer: Fabian Pedregosa, session 319	Salle DENUCE Bld Q, Ground Floor Z 8 F 3x30 min Second order methods for training ML models Chair: Julien Mairal, session 474	FABRE Bld J, Ground Floor Z 8 F 3x30 min Problems in the intersection of machine learning and optimization Chair: Ross Anderson, session 328
Learning	FABRE Bld J, Ground Floor Z 8 F 4x30 min Structured Optimization for Machine Learning and Signal Processing Organizer: Lin Xiao, session 330	FABRE Bld J, Ground Floor Z 8 F 3x30 min Convex optimization, distances and constraints Chair: Pablo Parrilo, session 476	Salle 22 Bld G, 2nd floor Z 6 F 2x20 min Large-scale convex optimization Chair: Alexander Rogozin, session 479
Network	Salle 18 Bld I, 1st floor Z 7 F 4x30 min Robust network optimization Organizer: Dimitri Papadimitriou, session 357		
Logistics		Salle 16 Bld I, 2nd floor Z 7 F 3x30 min Rail and Maritime Transportation Chair: Kazuhiro Kobayashi, session 454	Salle 24 Bld G, 3rd floor Z 6 F 4x20 min Location and Routing Chair: Mustapha Oudani, session 451
Logistics			Salle 16 Bld I, 2nd floor Z 7 F 3x20 min Production-Routing Chair: Feng Gao, session 456
Scheduling		Salle 18 Bld I, 1st floor Z 7 F 3x30 min Scheduling in Networks Chair: Hamish Waterer, session 532	Salle 18 Bld I, 1st floor Z 7 F 3x20 min Machine Scheduling 2 Chair: Guopeng Song, session 529
Energy	Salle DENUCE Bld Q, Ground Floor Z 8 F 4x30 min Decomposition Techniques to Solve Large-Scale Optimization Problems for Electricity and Natural Gas Systems Organizer: Ramteen Sioshansi, session 136	Salle 23 Bld G, 3rd floor Z 6 F 3x30 min Conic Optimization and Power Systems Organizer: Jakub Marecek, session 68	Salle DENUCE Bld Q, Ground Floor Z 8 F 4x20 min Optimization and modeling of integrated energy systems Organizer: Jalal Kazempour, session 71
Energy	Salle 23 Bld G, 3rd floor Z 6 F 4x30 min Energy-aware planning and scheduling 1 Organizer: Sandra U. Ngueveu, session 177	Salle 24 Bld G, 3rd floor Z 6 F 2x30 min Emerging Energy Markets Organizer: Dennice Gayme, session 291	Salle 23 Bld G, 3rd floor Z 6 F 3x30 min Energy Market Models Chair: Sauleh Siddiqui, session 522
Energy	Salle 24 Bld G, 3rd floor Z 6 F 4x30 min Distribution and Demand Flexibility Chair: Golbon Zakeri, session 510		
Sciences	Salle LA4 Bld L, Basement Z 8 F 3x30 min Energy markets Organizer: Martine Labbé, session 50	Salle LA4 Bld L, Basement Z 8 F 3x30 min Air Transportation and Air Traffic Management Organizer: Sonia Cafieri, session 315	Salle LA4 Bld L, Basement Z 8 F 3x30 min Resource-constrained assignment and scheduling Organizer: Fabian Bastin, session 398
Algo	PITRES Bld O, Ground Floor Z 8 F 3x30 min Progress in MIP Solvers I Organizer: Michael Winkler, session 235	PITRES Bld O, Ground Floor Z 8 F 3x30 min Progress in Conic and MIP Solvers Organizer: Imre Polik, session 237	PITRES Bld O, Ground Floor Z 8 F 3x30 min Progress in MIP Solvers II Organizer: Hans Mittelman, session 234
Algo	Salle 22 Bld G, 2nd floor Z 6 F 4x30 min Numerically Efficient Methods for Piecewise Algorithmic Differentiation I Organizer: Torsten Bosse, session 269	Salle 22 Bld G, 2nd floor Z 6 F 3x30 min Structure Detection in Integer Programming Organizer: Taghi Khaniyev, session 272	

Thursday 05

CLUSTER: Discrete Optimization & Integer Programming

Stream	8:30-10:30 AM	3:15-4:45 PM	5:00-6:30 PM
IPtheory	Salle 34 Bld B, 1st floor Z 3 F 4x30 min Integer linear programming, convex geometry, and lattices Organizer: Sinai Robins, session 142	Salle 42 Bld C, 3rd floor Z 1 F 3x30 min Non-Standard IP Methods Chair: Ulf Friedrich, session 513	Salle 43 Bld C, 3rd floor Z 1 F 4x20 min Advances in Integer Programming Organizer: Robert Hildebrand, session 227
IPtheory	Salle 35 Bld B, Intermediate Z 4 F 4x30 min Convexity and Polytopes Chair: David Warme, session 518	Salle 43 Bld C, 3rd floor Z 1 F 3x30 min Polynomial Time Solvable Problems and Complete Descriptions Chair: Andreas Bärmann, session 520	Salle 42 Bld C, 3rd floor Z 1 F 3x30 min Cutting Planes for Special Problems Chair: Eleazar Madriz, session 517
IPpractice	Salle 44 Bld C, 3rd floor Z 1 F 4x30 min Advanced Linear(ized) MIP Formulations for Zero-One Programs Organizer: Sven Mallach, session 127	Salle 44 Bld C, 3rd floor Z 1 F 3x30 min Computational Issues in Integer Programming Organizer: Ricardo Fukasawa, session 289	Salle 36 Bld B, Intermediate Z 4 F 4x20 min Matching Problems Organizer: Sergio García Quiles, session 175
IPpractice			Salle 44 Bld C, 3rd floor Z 1 F 4x20 min Cutting Planes Chair: Fabrizio Marinelli, session 485
MINLP		Salle 39 Bld E, 3rd floor Z 1 F 3x30 min Convexification and more (I) Organizer: Jon Lee, session 62	DURKHEIM Bld A, 3rd floor Z 1 F 3x30 min Convexification and more (II) Organizer: Akshay Gupta, session 106
MINLP		Salle 34 Bld B, 1st floor Z 3 F 3x30 min Heuristics in MINLP Chair: Bertrand Travacca, session 276	Salle 34 Bld B, 1st floor Z 3 F 3x30 min Relaxations in MINLP Chair: Jan Kronqvist, session 280
MINLP		Salle 35 Bld B, Intermediate Z 4 F 3x30 min MINLP with quadratic terms Chair: Enrico Bettiol, session 282	Salle 35 Bld B, Intermediate Z 4 F 3x30 min Applications in MINLP Chair: Justo Puerto, session 283
APPROX	LEYTEIRE Bld E, 3rd floor Z 1 F 4x30 min Submodular Maximization Organizer: Moran Feldman, session 29	LEYTEIRE Bld E, 3rd floor Z 1 F 3x30 min Approximation Algorithms for Clustering. Organizer: Deeparnab Chakrabarty, session 32	LEYTEIRE Bld E, 3rd floor Z 1 F 3x30 min Approximation Algorithms for Optimization under Uncertainty Organizer: Marc Uetz, session 95
APPROX	Salle 43 Bld C, 3rd floor Z 1 F 4x30 min Cycles and Trees Organizer: Tobias Mömke, session 90	Salle 36 Bld B, Intermediate Z 4 F 3x30 min Routing and Inventory Organizer: Dorit Hochbaum, session 343	
APPROX	Salle 36 Bld B, Intermediate Z 4 F 4x30 min Bin Packing Chair: Frits Spijksma, session 344		
COMB	Salle 41 Bld C, 3rd floor Z 1 F 4x30 min Graphs and clutters Organizer: Gerard Cornuejols, session 263	SIGALAS Bld C, 2nd floor Z 2 F 3x30 min Algorithms for TSP Organizer: Ola Svensson, session 239	Salle 41 Bld C, 3rd floor Z 1 F 3x30 min Approximation algorithms for combinatorial optimization problems Organizer: Thomas Rothvoss, session 265
COMB	Salle 39 Bld E, 3rd floor Z 1 F 4x30 min Graph theory Chair: Thomas Bellitto, session 422		Salle 39 Bld E, 3rd floor Z 1 F 4x20 min Heuristics for combinatorial optimization problems Chair: Evren Guney, session 428
CP	DURKHEIM Bld A, 3rd floor Z 1 F 4x30 min Parallel Computing and Sustainability Organizer: Bistra Dilkina, session 296	DURKHEIM Bld A, 3rd floor Z 1 F 3x30 min Applications of CP Organizer: Louis-Martin Rousseau, session 284	
CP	Salle 47 Bld A, 3rd floor Z 1 F 4x30 min Performance Analysis Organizer: Charlotte Truchet, session 298		

Thursday 05

CLUSTER: Optimization under Uncertainty

Stream	8:30-10:30 AM	3:15-4:45 PM	5:00-6:30 PM
Stoch	DENIGES Bld C, Ground Floor \underline{Z} 5 \underline{F} 4x30 min New results in chance-constrained optimization Chair: Bismark Singh, session 489	Salle 32 Bld B, Ground Floor \underline{Z} 5 \underline{F} 3x30 min Theoreticals and practicals aspects of decomposition algorithms for multistage stochastic problems: 1 Organizer: Vincent Leclère, session 246	Salle 32 Bld B, Ground Floor \underline{Z} 5 \underline{F} 4x20 min Theoreticals and practicals aspects of decomposition algorithms for multistage stochastic problems: 2 Organizer: Vincent Leclère, session 247
Stoch	Salle 32 Bld B, Ground Floor \underline{Z} 5 \underline{F} 4x30 min Topics in multistage and integer stochastic optimization Organizer: Jim Luedtke, session 490		Salle 30 Bld B, Ground Floor \underline{Z} 5 \underline{F} 3x20 min Topics in multistage stochastic optimization Chair: Felipe Beltrán, session 492
Robust	Salle 37 Bld B, Intermediate \underline{Z} 4 \underline{F} 4x30 min K-adaptability Organizer: Anirudh Subramanyam, session 1	DENIGES Bld C, Ground Floor \underline{Z} 5 \underline{F} 3x30 min Distributionally Robust Optimization With Marginals and Cones Organizer: Divya Padmanabhan, session 354	DENIGES Bld C, Ground Floor \underline{Z} 5 \underline{F} 3x30 min Robust Optimization under Data Uncertainty Organizer: Omid Nohadani, session 98
Robust	Salle 33 Bld B, Ground Floor \underline{Z} 5 \underline{F} 3x30 min New applications of robust optimizations Chair: Mirjam Duer, session 461	Salle 37 Bld B, Intermediate \underline{Z} 4 \underline{F} 3x30 min Non-linear robust optimization Chair: Laurent Alfandari, session 460	Salle 37 Bld B, Intermediate \underline{Z} 4 \underline{F} 4x20 min Combinatorial robust optimization I Organizer: Marc Goerigk, session 167
Markov			Salle 31 Bld B, Ground Floor \underline{Z} 5 \underline{F} 3x30 min Approximation in dynamic programming Chair: Philip Placek, session 382
Game	Salle 30 Bld B, Ground Floor \underline{Z} 5 \underline{F} 4x30 min Stackelberg Games Chair: Stefano Coniglio, session 374	Salle 30 Bld B, Ground Floor \underline{Z} 5 \underline{F} 3x30 min Generation and Representation Algorithms in Multiobjective Optimization Organizer: Michael Stiglmayr, session 267	

Thursday 05

CLUSTER: Continuous Optimization

Stream	8:30-10:30 AM	3:15-4:45 PM	5:00-6:30 PM
NLP	Salle ARNOZAN Bld Q, Ground Floor Z 8 F 4x30 min First-order methods: advances and applications Organizer: Immanuel Bomze, session 3	Salle 05 Bld Q, 1st floor Z 11 F 3x30 min Methods of Optimization in Riemannian Manifolds Organizer: Orizon Ferreira, session 21	Salle 05 Bld Q, 1st floor Z 11 F 4x20 min Polynomial and tensor optimization II Organizer: Jiawang Nie, session 6
NLP	GINTRAC Bld Q, Ground Floor Z 8 F 4x30 min Recent advances in interior point methods and NLP Organizer: Michael Todd, session 77		Salle KC7 Bld K, Intermediate 2 Z 10 F 3x20 min First Order Methods II Chair: Guillaume Berger, session 437
NLP	Salle 05 Bld Q, 1st floor Z 11 F 4x30 min Machine learning for optimisation Organizer: Coralie Cartis, session 176		
NLP	Salle KC7 Bld K, Intermediate 2 Z 10 F 4x30 min First Order Methods I Chair: Sandra Santos, session 436		
Global			Salle 20 Bld G, 1st floor Z 6 F 4x20 min Global Optimization 3 Chair: Jean-Baptist Hiriart-Urruty, session 503
NonSmooth	Salle LC4 Bld L, Intermediate 1 Z 9 F 4x30 min Universal methods in non-smooth analysis Organizer: Alexander Gasnikov, session 53	Salle 8 Bld N, 4th floor Z 12 F 3x30 min Extending the Reach of First-Order Methods, Part II Organizer: Robert Freund, session 286	Salle LC4 Bld L, Intermediate 1 Z 9 F 3x30 min Efficient Semismooth Newton Methods for Large Scale Statistical Optimization Problems Organizer: Defeng Sun, session 123
NonSmooth	Salle 8 Bld N, 4th floor Z 12 F 4x30 min First-order methods for nonconvex and pathological convex problems Organizer: Wotao Yin, session 183		Salle 8 Bld N, 4th floor Z 12 F 3x30 min Different faces of nonsmoothness in optimization Organizer: Tim Hoheisel, session 212
NonSmooth	Salle 9 Bld N, 4th floor Z 12 F 4x30 min Non smooth optimization for large scale problems Organizer: Yu Du, session 556		
SDP	Salle 20 Bld G, 1st floor Z 6 F 4x30 min Computer-assisted analyses of optimization algorithms I Organizer: Adrien Taylor, session 19	Salle LC5 Bld L, Intermediate 1 Z 10 F 3x30 min Noncommutative polynomial optimization: semidefinite relaxations, free convexity and applications to quantum information II Organizer: Monique Laurent, session 18	Salle AURIAC Bld G, 1st floor Z 6 F 4x20 min Recent Advances in Conic Programming III Organizer: Masakazu Muramatsu, session 84
SDP	Salle LC5 Bld L, Intermediate 1 Z 10 F 4x30 min Geometry and duality in convex optimization Organizer: Javier Pena, session 160		Salle LC5 Bld L, Intermediate 1 Z 10 F 4x20 min Using coning programming in problems solving Chair: Kurt Majewski, session 497
Variat	Salle 06 Bld Q, 1st floor Z 11 F 4x30 min Nonlinear Optimization and Variational Inequalities I Organizer: Xin Liu, session 140	Salle 06 Bld Q, 1st floor Z 11 F 3x30 min Nonlinear Optimization and Variational Inequalities II Organizer: Cong Sun, session 141	Salle 06 Bld Q, 1st floor Z 11 F 3x30 min VU-decomposition techniques for nonsmooth optimization Organizer: Claudia Sagastizabal, session 158
Variat			Salle ARNOZAN Bld Q, Ground Floor Z 8 F 4x20 min Variational Analysis 5 Organizer: David Sossa, session 371
RandomM	Salle KC6 Bld K, Intermediate 1 Z 10 F 4x30 min Recent Advances on Stochastic Algorithms and Machine Learning Organizer: Shiqian Ma, session 202	Salle KC6 Bld K, Intermediate 1 Z 10 F 3x30 min Asynchronous Parallel and Distributed Optimization Organizer: Wotao Yin, session 200	Salle KC6 Bld K, Intermediate 1 Z 10 F 3x20 min Recent Progress on Second-order Type Optimization Methods Organizer: Andre Milzarek, session 302
DerFree	Salle 21 Bld G, Intermediate Z 6 F 4x30 min Bayesian and Randomized Optimization I Chair: Stefan Wild, session 39		Salle 21 Bld G, Intermediate Z 6 F 3x30 min Advances in DFO III Chair: Juan Meza, session 496
Control	Salle AURIAC Bld G, 1st floor Z 6 F 4x30 min Optimal Control of Variational Inequalities and Complementarity Systems Chair: Alexandre Vieira, session 336	Salle AURIAC Bld G, 1st floor Z 6 F 2x30 min Theory and Methods for ODE- and PDE-Constrained Optimization 2 Chair: Johann Schmitt, session 333	

Thursday 05

CLUSTER: Specific Models, Algorithms, and Software

Stream	8:30-10:30 AM	3:15-4:45 PM	5:00-6:30 PM
Learning	FABRE Bld J, Ground Floor Z 8 F 4x30 min First-order methods for large-scale convex problems Organizer: Stephen Vavasis, session 316	FABRE Bld J, Ground Floor Z 8 F 3x30 min Accelerating Learning Organizer: Martin Takac, session 322	FABRE Bld J, Ground Floor Z 8 F 4x20 min First-order methods for large-scale convex problems II Organizer: Stephen Vavasis, session 318
Learning	Salle DENUCE Bld Q, Ground Floor Z 8 F 4x30 min Large-scale learning Organizer: Lorenzo Rosasco, session 335	Salle 16 Bld I, 2nd floor Z 7 F 3x30 min Robust first order methods Organizer: Fatma Kilinc-Karzan, session 332	Salle 16 Bld I, 2nd floor Z 7 F 4x20 min Advances in Reinforcement Learning Algorithms Organizer: Lin Xiao, session 329
Learning	Salle 16 Bld I, 2nd floor Z 7 F 4x30 min Dynamical systems, control and optimization Chair: Benjamin Recht, session 470		Salle 22 Bld G, 2nd floor Z 6 F 4x20 min Ranking and recommendation Chair: Aleksandra Burashnikova, session 472
Network	Salle LA4 Bld L, Basement Z 8 F 4x30 min Multi-commodity flows Organizer: Ralf Borndörfer, session 358		
Logistics	PITRES Bld O, Ground Floor Z 8 F 3x30 min Vehicle Routing I Chair: Guy Desaulniers, session 411	PITRES Bld O, Ground Floor Z 8 F 2x30 min Path Problems Chair: Yanchao Liu, session 453	Salle 24 Bld G, 3rd floor Z 6 F 3x20 min Vehicle Routing III Chair: Raquel Bernardino, session 413
Scheduling		Salle 18 Bld I, 1st floor Z 7 F 3x30 min Production Planning Chair: Michel Siemon, session 531	Salle 18 Bld I, 1st floor Z 7 F 4x20 min Supply Chain Chair: Daniel Ramón-Lumbierres, session 533
Energy	Salle 23 Bld G, 3rd floor Z 6 F 4x30 min Unit Commitment Problem and Applications Organizer: Tiziano Parriani, session 94	Salle DENUCE Bld Q, Ground Floor Z 8 F 3x30 min Optimization Models for Renewable Energy Integration I Organizer: Luis Zuluaga, session 120	Salle DENUCE Bld Q, Ground Floor Z 8 F 3x30 min Equilibrium and Optimization in Energy Markets Organizer: Asgeir Tomasgard, session 151
Energy	Salle 24 Bld G, 3rd floor Z 6 F 4x30 min Mining Applications Organizer: Alexandra Newman, session 172	Salle 23 Bld G, 3rd floor Z 6 F 3x30 min Progress in Algorithms for Optimal Power Flow Problems II Chair: Miguel Anjos, session 509	Salle 23 Bld G, 3rd floor Z 6 F 3x30 min Gas Network and Market Optimization Organizer: Jonas Schweiger, session 293
Energy		Salle 24 Bld G, 3rd floor Z 6 F 3x30 min Electricity Generation Scheduling and Dispatch Chair: Christophe Duhamel, session 511	
Sciences		Salle LA4 Bld L, Basement Z 8 F 3x30 min Inverse Problems in Physics Chair: Leo Liberti, session 391	Salle LA4 Bld L, Basement Z 8 F 4x20 min Medicine and Metabolic engineering Chair: Mahdi Doostmohammadi, session 396
Algo	Salle 22 Bld G, 2nd floor Z 6 F 4x30 min Numerically Efficient Methods for Piecewise Algorithmic Differentiation II Organizer: Torsten Bosse, session 270	Salle 22 Bld G, 2nd floor Z 6 F 3x30 min High-Performance Computing in Optimization II Chair: Joaquim Dias Garcia, session 466	Salle 9 Bld N, 4th floor Z 12 F 4x20 min Large-scale combinatorial optimization implementations Organizer: Aaron Archer, session 96
Algo	Salle 18 Bld I, 1st floor Z 7 F 3x30 min High-Performance Computing in Optimization I Organizer: Kibaek Kim, session 271		PITRES Bld O, Ground Floor Z 8 F 3x30 min Computational OR in Julia/JuMP Organizer: Miles Lubin, session 238

Friday 06

CLUSTER: Discrete Optimization & Integer Programming

Stream	8:30-10:30 AM	3:15-4:45 PM	5:00-6:30 PM
IPtheory	Salle 43 Bld C, 3rd floor Z 1 F 4x30 min Recent advances in Integer Optimization Organizer: Alberto Del Pia, session 218	Salle 34 Bld B, 1st floor Z 3 F 3x30 min Polyhedral theory in practice Organizer: Mourad Baiou, session 309	Salle 34 Bld B, 1st floor Z 3 F 4x20 min Machine Learning and Discrete Optimization Organizer: Sebastian Pokutta, session 308
IPtheory	Salle 35 Bld B, Intermediate Z 4 F 4x30 min Mixed Integer Programming Representability Organizer: Juan Pablo Vielma, session 275	Salle 42 Bld C, 3rd floor Z 1 F 3x30 min Extended Formulations Chair: Bartosz Filipecki, session 514	
IPpractice	Salle 44 Bld C, 3rd floor Z 1 F 4x30 min Integer Programming and Crew Scheduling Organizer: Francois Soumis, session 292	Salle 44 Bld C, 3rd floor Z 1 F 3x30 min Routing Chair: Cole Smith, session 484	Salle 44 Bld C, 3rd floor Z 1 F 4x20 min Decomposition II Chair: Natasha Boland, session 487
IPpractice		Salle 36 Bld B, Intermediate Z 4 F 3x30 min IP Practice III Chair: Samuel Brito, session 507	Salle 36 Bld B, Intermediate Z 4 F 2x20 min Dual Ascent Chair: Sara Maqrot, session 505
MINLP	Salle 34 Bld B, 1st floor Z 3 F 3x30 min Optimal Control Problems with Discrete Switches Organizer: Christian Kirches, session 102	Salle 39 Bld E, 3rd floor Z 1 F 3x30 min Outer Convexification and Mixed-Integer Optimal Control Organizer: Sebastian Sager, session 103	DURKHEIM Bld A, 3rd floor Z 1 F 3x30 min Mixed-Integer PDE-Constrained Optimization Organizer: Sven Leyffer, session 63
MINLP		DURKHEIM Bld A, 3rd floor Z 1 F 3x30 min Intersection cuts, disjunctions, and valid inequalities Organizer: Eli Towle, session 180	Salle 39 Bld E, 3rd floor Z 1 F 3x30 min Global Optimization for nonconvex MINLPs Organizer: Hassan Hijazi, session 92
MINLP		Salle 35 Bld B, Intermediate Z 4 F 3x30 min Branch-and-cut techniques Organizer: Teodora Dan, session 277	Salle 35 Bld B, Intermediate Z 4 F 3x30 min Recent Advances and Applications of MINLP Organizer: Jose Ucha, session 139
APPROX	LEYTEIRE Bld E, 3rd floor Z 1 F 4x30 min Data-Driven Revenue Management with Customer Choice Organizer: Jacob Feldman, session 81	LEYTEIRE Bld E, 3rd floor Z 1 F 3x30 min Submodular Maximization. Organizer: Justin Ward, session 179	LEYTEIRE Bld E, 3rd floor Z 1 F 4x20 min Algorithmic Fairness and Optimization Organizer: Nisheeth Vishnoi, session 161
APPROX	Salle 36 Bld B, Intermediate Z 4 F 4x30 min Clustering. Organizer: Zac Friggstad, session 155	Salle 43 Bld C, 3rd floor Z 1 F 3x30 min Submodular and Incremental Maximization Organizer: Martin Gross, session 340	Salle 43 Bld C, 3rd floor Z 1 F 3x30 min Algorithmic Discrepancy Organizer: Nikhil Bansal, session 164
COMB	SIGALAS Bld C, 2nd floor Z 2 F 4x30 min Matching and scheduling Organizer: Seffi Naor, session 54	SIGALAS Bld C, 2nd floor Z 2 F 3x30 min Combinatorial aspects of Linear Programming Organizer: Daniel Dadush, session 259	SIGALAS Bld C, 2nd floor Z 2 F 3x30 min Packing Steiner Trees Organizer: Stephan Held, session 260
COMB	Salle 41 Bld C, 3rd floor Z 1 F 4x30 min Recent progress in graph cut problems Organizer: Karthekeyan Chandrasekaran, session 244		Salle 41 Bld C, 3rd floor Z 1 F 4x20 min Optimization problems in graphs and related Chair: Claudio Arbib, session 423
COMB	Salle 39 Bld E, 3rd floor Z 1 F 4x30 min Algorithmic aspects of connectivity in network design Organizer: Neil Olver, session 264		
CP	DURKHEIM Bld A, 3rd floor Z 1 F 4x30 min Graphical Optimization Model 2 Organizer: Maria Restrepo, session 297		

Friday 06

CLUSTER: Optimization under Uncertainty

Stream	8:30-10:30 AM	3:15-4:45 PM	5:00-6:30 PM
Stoch	DENIGES Bld C, Ground Floor \underline{Z} 5 \underline{F} 4x30 min Theoretical and practical aspects of decomposition algorithms for multistage stochastic problems: 3 Organizer: Vincent Leclère, session 245	Salle 32 Bld B, Ground Floor \underline{Z} 5 \underline{F} 3x30 min Risk-aware decision making Organizer: Minseok Ryu, session 251	Salle 30 Bld B, Ground Floor \underline{Z} 5 \underline{F} 3x20 min Topics in stochastic optimization Chair: Quentin Mercier, session 494
Stoch	Salle 32 Bld B, Ground Floor \underline{Z} 5 \underline{F} 4x30 min New methods for stochastic optimization and variational inequalities Chair: Yunxiao Deng, session 491		
Robust	Salle 33 Bld B, Ground Floor \underline{Z} 5 \underline{F} 3x30 min New Horizons in Robust Optimization Organizer: Angelos Georghiou, session 447	Salle 33 Bld B, Ground Floor \underline{Z} 5 \underline{F} 3x30 min Distributionally Robust Optimization: Models and Applications Organizer: Selin Ahipasaoglu, session 355	Salle 37 Bld B, Intermediate \underline{Z} 4 \underline{F} 4x20 min Robust Combinatorial Optimization II Organizer: Agostinho Agra, session 168
Robust		DENIGES Bld C, Ground Floor \underline{Z} 5 \underline{F} 3x30 min Distributionally Robust Optimization Organizer: Daniel Kuhn, session 446	Salle 33 Bld B, Ground Floor \underline{Z} 5 \underline{F} 3x30 min Wasserstein Distributionally Robust Optimization Organizer: Peyman Mohajerin Esfaha, session 448
Markov	Salle 31 Bld B, Ground Floor \underline{Z} 5 \underline{F} 4x30 min Advances in theory of dynamic programming Chair: Stephane Gaubert, session 385	Salle 31 Bld B, Ground Floor \underline{Z} 5 \underline{F} 3x30 min Discrete stochastic dynamic programming Chair: Adam Narkiewicz, session 384	Salle 31 Bld B, Ground Floor \underline{Z} 5 \underline{F} 3x30 min Tractability and approximation algorithms in dynamic programming Chair: Alexander Hopp, session 383
Game	Salle 30 Bld B, Ground Floor \underline{Z} 5 \underline{F} 4x30 min Algorithmic Game Theory II Chair: Margarida Carvalho, session 372	Salle 30 Bld B, Ground Floor \underline{Z} 5 \underline{F} 3x30 min Scalarization, representation and the comparison of methods in Multiobjective Optimization Chair: Tyler Perini, session 378	

Friday 06

CLUSTER: Continuous Optimization

Stream	8:30-10:30 AM	3:15-4:45 PM	5:00-6:30 PM
NLP	Salle 05 <u>Bld Q</u> , 1st floor <u>Z 11 F</u> 4x30 min First order methods Organizer: Gerardo Toraldo, session 27	GINTRAC <u>Bld Q</u> , Ground Floor <u>Z 8 F</u> 3x30 min Interior Point Methods in Engineering Applications I Organizer: Jacek Gondzio, session 60	GINTRAC <u>Bld Q</u> , Ground Floor <u>Z 8 F</u> 3x30 min Moment relaxations for polynomial optimization with symmetries Organizer: Markus Schweighofer, session 10
NLP	GINTRAC <u>Bld Q</u> , Ground Floor <u>Z 8 F</u> 4x30 min Stochastic and Nonlinear Optimization II Organizer: Jorge Nocedal, session 48	Salle 05 <u>Bld Q</u> , 1st floor <u>Z 11 F</u> 3x30 min Nonlinear Optimization Chair: Marc Steinbach, session 429	Salle KC7 <u>Bld K</u> , Intermediate 2 <u>Z 10 F</u> 3x30 min Subspace methods in NLP II Organizer: Panos Parpas, session 44
NLP	Salle KC7 <u>Bld K</u> , Intermediate 2 <u>Z 10 F</u> 4x30 min Regularization and Iterative Methods in Large-Scale Optimization Organizer: Jacek Gondzio, session 59		Salle 05 <u>Bld Q</u> , 1st floor <u>Z 11 F</u> 4x20 min Primal-dual and ADMM algorithms for non-linear programming Organizer: Marco Sciandrone, session 91
NLP	Salle 9 <u>Bld N</u> , 4th floor <u>Z 12 F</u> 4x30 min Decomposition Methods Chair: Roger Behling, session 431		Salle 9 <u>Bld N</u> , 4th floor <u>Z 12 F</u> 3x20 min Linear Optimization I Chair: Jianming Shi, session 415
Global		Salle 20 <u>Bld G</u> , 1st floor <u>Z 6 F</u> 3x30 min Global Optimization 2 Chair: Mirjam Duer, session 502	Salle 20 <u>Bld G</u> , 1st floor <u>Z 6 F</u> 3x30 min Global Optimization 1 Chair: Jean-Baptist Hiriart-Urruty, session 501
NonSmooth	Salle LC4 <u>Bld L</u> , Intermediate 1 <u>Z 9 F</u> 4x30 min Geometry in complexity analysis of non-smooth optimization methods Organizer: Jalal Fadili, session 199	Salle 8 <u>Bld N</u> , 4th floor <u>Z 12 F</u> 3x30 min Advances in the first-order methods for convex optimization Organizer: Angelia Nedich, session 73	Salle 8 <u>Bld N</u> , 4th floor <u>Z 12 F</u> 3x30 min Nonsmooth DC optimization with applications Chair: Napsu Karmita, session 46
NonSmooth	Salle 8 <u>Bld N</u> , 4th floor <u>Z 12 F</u> 4x30 min Convergence analysis for non smooth optimization Organizer: Robert Csetnek, session 557		Salle LC4 <u>Bld L</u> , Intermediate 1 <u>Z 9 F</u> 3x30 min Nonconvex Optimization: Theory and Methods - Part 3 Organizer: Genaro Lopez, session 188
SDP	Salle 20 <u>Bld G</u> , 1st floor <u>Z 6 F</u> 4x30 min Copositive and completely positive optimization Organizer: Olga Kuryatnikova, session 24	Salle LC5 <u>Bld L</u> , Intermediate 1 <u>Z 10 F</u> 3x30 min Relative Entropy Optimization I Organizer: Venkat Chandrasekaran, session 111	Salle AURIAC <u>Bld G</u> , 1st floor <u>Z 6 F</u> 3x30 min Computer-assisted analyses of optimization algorithms II Organizer: Adrien Taylor, session 16
SDP	Salle LC5 <u>Bld L</u> , Intermediate 1 <u>Z 10 F</u> 4x30 min Stability and scaling in conic programming Chair: Diego Cifuentes, session 498		Salle LC5 <u>Bld L</u> , Intermediate 1 <u>Z 10 F</u> 3x30 min Sparse Semidefinite Programming Organizer: Somayeh Sojoudi, session 17
Variat	Salle 06 <u>Bld Q</u> , 1st floor <u>Z 11 F</u> 4x30 min Stochastic Optimization and Variational Inequalities Organizer: Hailin Sun, session 149	Salle 06 <u>Bld Q</u> , 1st floor <u>Z 11 F</u> 3x30 min Algorithms for optimization and variational problems with possibly nonisolated solutions II Organizer: Alexey Izmailov, session 153	Salle 06 <u>Bld Q</u> , 1st floor <u>Z 11 F</u> 3x30 min Nonlinear Optimization and Variational Inequalities IV Organizer: Cong Sun, session 144
Variat	Salle ARNOZAN <u>Bld Q</u> , Ground Floor <u>Z 8 F</u> 4x30 min Variational Analysis 3 Organizer: Johanna Burtscheidt, session 369	Salle ARNOZAN <u>Bld Q</u> , Ground Floor <u>Z 8 F</u> 3x30 min Nash equilibrium and Games 2 Organizer: Giancarlo Bigi, session 366	Salle ARNOZAN <u>Bld Q</u> , Ground Floor <u>Z 8 F</u> 4x20 min Variational Analysis 2 Organizer: David Salas, session 367
RandomM	Salle KC6 <u>Bld K</u> , Intermediate 1 <u>Z 10 F</u> 3x30 min Recent Advances in Coordinate Descent and Constrained Problems Organizer: Ion Necoara, session 208		Salle KC6 <u>Bld K</u> , Intermediate 1 <u>Z 10 F</u> 4x20 min Algorithms for Structured Statistical Optimization Chair: Ilker Birbil, session 349
DerFree	Salle 21 <u>Bld G</u> , Intermediate <u>Z 6 F</u> 4x30 min Challenging applications in DFO Chair: Francesco Rinaldi, session 38	Salle 21 <u>Bld G</u> , Intermediate <u>Z 6 F</u> 3x30 min Advances in DFO IV Chair: Katya Scheinberg, session 125	Salle 21 <u>Bld G</u> , Intermediate <u>Z 6 F</u> 2x30 min Derivative-free global optimization algorithms Chair: Zaikun Zhang, session 41
Control	Salle AURIAC <u>Bld G</u> , 1st floor <u>Z 6 F</u> 3x30 min Optimal Control in Engineering Applications Chair: Maxime Grangereau, session 310		

Friday 06

CLUSTER: Specific Models, Algorithms, and Software

Stream	8:30-10:30 AM	3:15-4:45 PM	5:00-6:30 PM
Learning	FABRE Bld J, Ground Floor Z 8 F 3x30 min Dimensionality reduction tools for learning: A sketchy session Organizer: Robert Gower, session 313	Salle 16 Bld I, 2nd floor Z 7 F 3x30 min Discrete methods for data centers and graphs Organizer: Aaron Archer, session 477	FABRE Bld J, Ground Floor Z 8 F 4x20 min Spectral and Semidefinite Methods for Learning Organizer: Martin Jaggi, session 321
Learning	Salle 16 Bld I, 2nd floor Z 7 F 4x30 min Dealing with non-convexity Chair: Damek Davis, session 473	FABRE Bld J, Ground Floor Z 8 F 3x30 min Classification, regression and clustering Chair: Dimitris Bertsimas, session 480	
Network	Salle 18 Bld I, 1st floor Z 7 F 4x30 min Telecommunications Organizer: Edoardo Amaldi, session 361		Salle 18 Bld I, 1st floor Z 7 F 4x20 min Transportation networks Chair: Bernard Gendron, session 359
Logistics	PITRES Bld O, Ground Floor Z 8 F 4x30 min Hybrid Algorithms and Matheuristics for VRP Organizer: Thibaut Vidal, session 181	Salle 24 Bld G, 3rd floor Z 6 F 3x30 min Vehicle Routing II Chair: Chris Potts, session 412	Salle 16 Bld I, 2nd floor Z 7 F 2x20 min Logistics Networks Chair: El Hassan Laaziz, session 468
Scheduling	Salle 23 Bld G, 3rd floor Z 6 F 3x30 min Scheduling Applications Chair: Mauricio de Souza, session 526	Salle 18 Bld I, 1st floor Z 7 F 3x30 min Machine Scheduling 1 Chair: Renan Trindade, session 527	
Energy	Salle 24 Bld G, 3rd floor Z 6 F 3x30 min Power Systems Models with Discrete Decision Variables Organizer: Adolfo Escobedo, session 26	Salle DENUCE Bld Q, Ground Floor Z 8 F 3x30 min Estimation and Learning for Power Systems Organizer: Javad Lavaei, session 25	Salle 23 Bld G, 3rd floor Z 6 F 3x30 min Energy-aware planning and scheduling 2 Organizer: Christian Artigues, session 178
Energy	Salle DENUCE Bld Q, Ground Floor Z 8 F 4x30 min Machine Learning in State Estimation and Situational Awareness in Power Grids Organizer: Deepjyoti Deka, session 134	Salle 22 Bld G, 2nd floor Z 6 F 3x30 min Optimization in Energy Chair: Andrea Simonetto, session 515	Salle 24 Bld G, 3rd floor Z 6 F 3x20 min Stochastic Methods for Energy Optimization Chair: Tristan Rigaut, session 294
Energy		Salle 23 Bld G, 3rd floor Z 6 F 3x30 min Optimization for Energy System Planning Chair: Andrew Liu, session 524	
Sciences	Salle LA4 Bld L, Basement Z 8 F 3x30 min Finance and Portfolio Optimization Organizer: Asaf Shupo, session 395	Salle LA4 Bld L, Basement Z 8 F 3x30 min Industrial dynamics and Environmental policy Organizer: Inmaculada Garcia Fernandez, session 392	Salle LA4 Bld L, Basement Z 8 F 4x20 min Optimization and Game Theory Organizer: Veerle Timmermans, session 402
Algo	Salle 22 Bld G, 2nd floor Z 6 F 4x30 min New Developments in Optimization Modeling Software Organizer: Robert Fourer, session 101	PITRES Bld O, Ground Floor Z 8 F 3x30 min Computational Integer Programming I Organizer: Domenico Salvagnin, session 273	PITRES Bld O, Ground Floor Z 8 F 3x30 min Computational Integer Programming II Organizer: Domenico Salvagnin, session 274

Program per Time Slot

Room	Invited Talks - Monday 11:00 AM – 12:00 AM			
Auditorium Build Symp H, Z 0 Gambetta 1x60 min	On the relationship between machine learning and optimization, <i>Organizer:</i> Michel Goemans, session 552			PLENARY
	FRANCIS BACH, On the relationship between machine learning and optimization			

Room	Invited Talks - Monday 1:30 PM – 2:30 PM			
Auditorium Build Symp H, Z 0 Gambetta 1x60 min	Multiobjective Optimization with PDE Constraints, <i>Organizer:</i> Stephen J Wright, session 550			SEMI
	MICHAEL HINTERMÜLLER, Multiobjective Optimization with PDE Constraints			
SIGALAS Build C, Z 2 2nd floor 1x60 min	What's happening in nonconvex optimization? A couple of stories, <i>Organizer:</i> Jean-Baptist Hiriart-Urruty, session 536			KEYNOTE
	EMMANUEL CANDÈS, What's happening in nonconvex optimization? A couple of stories			
DENIGES Build C, Z 5 Ground Floor 1x60 min	Theoretical Analysis of Cutting-Planes in IP Solvers., <i>Organizer:</i> Gerard Cornuejols, session 538			KEYNOTE
	SANTANU DEY, Theoretical Analysis of Cutting-Plane Selection in IP Solvers.			

Room	Discrete Optimization & Integer Programming - Monday 3:15 PM – 4:45 PM			
Salle 43 Build C, Z 1 3rd floor 3x30 min	Provable guarantees for Cut Generating Functions, <i>Organizer:</i> Amitabh Basu, session 220			IPtheory
	JOSEPH PAAT, Using the geometry of S-free sets to find mixed-integer cut-generating functions	SRIRAM SANKARANARAYANAN, Can cut generating functions be good and efficient?	AMITABH BASU, Optimal cutting planes from the group relaxations	
Salle 44 Build C, Z 1 3rd floor 3x30 min	IP Practice I, Chair: Maurice Queyranne, session 506			IPpractice
	RAPHAEL HAUSER, IP models for dimensionality reduction and feature selection in categorical data	CARLOS CARDONHA, Network models for multiobjective discrete optimization	MAURICE QUEYRANNE, Optimum Turn-Restricted Paths, Nested Compatibility, and Optimum Convex Polygons	
Salle 39 Build E, Z 1 3rd floor 3x30 min	Exact Optimization Algorithms for Compressed Sensing, <i>Organizer:</i> Marc E Pfetsch, session 56			MINLP
	CHRISTOPH BRAUER, A primal-dual homotopy algorithm for sparse recovery with infinity norm constraints	ANDREAS TILLMANN, SparkMIP: Mixed-Integer Programming for the (Vector) Matroid Girth Problem	FREDERIC MATTER, Complex-valued ℓ_0 minimization problems with constant modulus constraints	
Salle 34 Build B, Z 3 1st floor 3x30 min	Tight relaxations in nonconvex MINLP, <i>Organizer:</i> Ambros Gleixner, session 128			MINLP
	EMILY SPEAKMAN, Using mixed volume theory to compute convex hull volume for trilinear monomials	STEFAN VIGERSKE, Revising the handling of nonlinear constraints in SCIP	AMBROS GLEIXNER, Two-dimensional Projections for Separation and Propagation of Bilinear Terms	
Salle 35 Build B, Z 4 Intermediate 3x30 min	MINLP methods in gas transport optimization (I), <i>Organizer:</i> Lars Schewe, session 162			MINLP
	LARS SCHEWE, MIP techniques for instantaneous gas transport optimization and gas market models	NICK MERTENS, Solving MINLPs by Simultaneous Convexification with Application to Gas Networks	FALK HANTE, Complementarity-Based Nonlinear Programming Techniques for Optimal Mixing in Gas	
LEYTEIRE Build E, Z 1 3rd floor 3x30 min	Geometry of Polynomials and Applications in Approximate Counting, <i>Organizer:</i> Shayan Oveis Gharan, session 99			APPROX
	GUUS REGTS, On a conjecture of Sokal on the location of roots of the independence polynomial	PIYUSH SRIVASTAVA, Zeros of polynomials and Ising partition functions	NIMA ANARI, A Deterministic Approximation Algorithm for Counting Bases of Matroids	
Salle 36 Build B, Z 4 Intermediate 3x30 min	Matching and Matroids, <i>Organizer:</i> José A Soto, session 341			APPROX
	MAXIMILIEN BURQ, Maximizing Efficiency in Dynamic Matching Markets	MORTEZA ZADIMOGHADDAM, Online Weighted Matching: Beating the 1/2 Barrier	JOSÉ SOTO, Strong Algorithms for the Ordinal Matroid Secretary Problem	
SIGALAS Build C, Z 2 2nd floor 3x30 min	On the Tree Augmentation Problem, <i>Organizer:</i> Laura Sanità, session 240			COMB
	DAVID ADJASHVILI, Beating Approximation Factor 2 For Weighted Tree Augmentation With Bounded Costs	JOCHEN KOENEMANN, Improved Approximation for Tree Augmentation via Chvatal Gomory Cuts	RICO ZENKLUSEN, Improved Approximation for Tree Augmentation: Saving by Rewiring	
Salle 41 Build C, Z 1 3rd floor 3x30 min	Scheduling with setup, uncertainty and precedences, <i>Organizer:</i> Monaldo Mastrolilli, session 419			COMB
	KIM-MANUEL KLEIN, Empowering the Configuration-IP	NICOLE MEGOW, Scheduling under Explorable Uncertainty	JOSE VERSCHAE, Min-sum scheduling under precedence constraints	
DURKHEIM Build A, Z 1 3rd floor 3x30 min	Global Optimization, <i>Organizer:</i> Hassan Hijazi, session 299			CP
	ADAM OUOROU, A class of proximal algorithms based on Chebychev centers for nonsmooth convex o	KAARTHIK SUNDAR, Convex relaxations for Mixed-Integer Multilinear Functions	TILLMANN WEISSER, Sparse Certificates for Polynomial Optimization	

Room	Optimization under Uncertainty - Monday 3:15 PM – 4:45 PM		
Salle 32 Build B, Z 5 Ground Floor 3x30 min	Scenario discretization techniques in stochastic optimization. <i>Organizer:</i> Fabian Bastin, session 287 THUY ANH TA, On a two-stage stochastic optimization problem with stochastic constraints	JULIEN KEUTCHAYAN, Multistage stochastic optimization: discretization of probability distributions	Stoch
DENIGES Build C, Z 5 Ground Floor 3x30 min	Preference robust optimization. <i>Organizer:</i> Erick Delage, session 166 WILLIAM HASKELL, Robust choice with multi-attribute quasi-concave choice functions	JONATHAN LI, Optimizing aspirational preferences when the choice of a measure is ambiguous	Robust
Salle 33 Build B, Z 5 Ground Floor 3x30 min	Distributionally Robust Optimization - New Theory and Applications. <i>Organizer:</i> Zhichao Zheng, session 356 YINI GAO, Data-Driven Bounded Rationality in Games- A Robust Framework	CAGIL KOCYIGIT, Distributionally Robust Mechanism Design	Robust
Salle 31 Build B, Z 5 Ground Floor 3x30 min	Approximate dynamic programming. <i>Organizer:</i> David Brown, session 159 MARTIN HAUGH, Information Relaxation Bounds for Partially Observed Markov Decision Processes	HUSEYIN TOPALOGLU, Approximate Dynamic Programming for Dynamic Assortment Optimization	Markov
Salle 30 Build B, Z 5 Ground Floor 3x30 min	Risk and Energy Markets. <i>Chair:</i> JULIO DERIDE, session 376 OLIVIER HUBER, On solving risk-averse equilibrium problems via reformulations	HENRI GERARD, On risk averse competitive equilibrium	Game
		ZHICHAO ZHENG, Schedule Reliability in Liner Shipping by Distributionally Robust Optimization	
		DAVID BROWN, Approximations to Stochastic Dynamic Programs via Information Relaxation Duality	
		JULIO DERIDE, Stochastic General Equilibrium Model with Application to Energy Markets	

Room	Continuous Optimization - Monday 3:15 PM – 4:45 PM		
GINTRAC Build Q, Z 8 Ground Floor 3x30 min	Polynomial and tensor optimization I. <i>Organizer:</i> Jiawang Nie, session 5 JEAN LASSEIRE, Sparse Polynomial Interpolation: Compressed Sensing, Super-resolution, or Prony?	STEPHANE GAUBERT, Eigenvalues inequalities for nonnegative tensors and their tropical analogues	NLP
Salle 05 Build Q, Z 11 1st floor 3x30 min	Convex regularization and inverse problems. <i>Organizer:</i> Pierre Weiss, session 216 VINCENT DUVAL, T-systems for super-resolution microscopy	FREDERIC DE GOURNAY, Convex regularization, sparsity and representation theorem	NLP
Salle KC7 Build K, Z 10 Intermediate 2 3x30 min	Sparse Recovery. <i>Chair:</i> Mustafa C Pinar, session 432 JOHN CHINNECK, LP-based Sparse Solutions Revisited	MUSTAFA PINAR, Sparse Recovery and Convex Quadratic Splines	NLP
Salle 8 Build N, Z 12 4th floor 3x30 min	Nonconvex Optimization: Theory and Methods - Part 1. <i>Organizer:</i> Shoham Sabach, session 184 JEROME BOLTE, From error bounds to the complexity of first-order descent methods	YAKOV VAISBOURD, Globally Solving the Trust Region Subproblem Using Simple First-Order Methods	NonSmooth
Salle 9 Build N, Z 12 4th floor 2x30 min	Adaptivity in non smooth optimization. <i>Organizer:</i> Masaru Ito, session 558 MASARU ITO, An adaptive first order method for weakly smooth and uniformly convex problems	SOMAYYA KOMAL, A Subgradient Algorithm for solving variational Inequality Problem	NonSmooth
Salle 20 Build G, Z 6 1st floor 3x30 min	Using SDP relaxations and solving them faster. <i>Organizer:</i> Elisabeth Gaar, session 113 SAMUEL BURER, Exact SDPs for a Class of (Random and Non-Random) Nonconvex QCQPs	NICOLÒ GUSMEROLI, SDP Based Solution Methods for Binary Quadratic Problems	SDP
Salle LC5 Build L, Z 10 Intermediate 1 3x30 min	Algorithms for nonlinear conic problems. <i>Chair:</i> Takayuki Okuno, session 463 LEONARDO MITO, Augmented Lagrangian for nonlinear SDPs applied to the covering problem	CUNLU ZHOU, Long-Step Path-Following Algorithm for Nonlinear Symmetric Programming Problems	SDP
Salle 06 Build Q, Z 11 1st floor 3x30 min	Proximal Methods for Structured Problems. <i>Organizer:</i> Ting Kei Pong, session 147 TIANXIANG LIU, A successive DC approximation method for nonconvex nonsmooth optimization	MAN-CHUNG YUE, Cubic Regularization Revisited: Faster (Local) Rates under Weaker Assumptions	Variat
Salle ARNOZAN Build Q, Z 8 Ground Floor 3x30 min	Algorithms for optimization and variational problems with possibly nonisolated solutions I. <i>Organizer:</i> Andreas Fischer, session 152 NICO STRASDAT, A special complementarity function revisited	ALEXEY IZMAILOV, Critical solutions of nonlinear equations: attraction for Newton-type methods	Variat
Salle KC6 Build K, Z 10 Intermediate 1 3x30 min	Coordinate Descent and Randomized Direct Search Methods. <i>Organizer:</i> Martin Takac, session 211 ASU OZDAGLAR, When Cyclic Coordinate Descent Outperforms Randomized Coordinate Descent	EL HOUICINE BERGOU, Random direct search method for unconstrained smooth minimization	RandomM
Salle 21 Build G, Z 6 Intermediate 3x30 min	Mixed-integer derivative-free optimization. <i>Chair:</i> Clément Royer, session 80 ANDREW CONN, Underlying algorithms and theory to our approach to MINLP without derivatives	DELPHINE SINOQUET, Benchmark of a trust region method for solving black-box mixed-integer problems	DerFree
Salle AURIAC Build G, Z 6 1st floor 3x30 min	Theory and Methods for ODE- and PDE-Constrained Optimization 1. <i>Chair:</i> Carl M Greiff, session 331 BEHZAD AZMI, On the Barzilai-Borwein step-sizes in Hilbert spaces	BENJAMIN HORN, Shape Optimization with Stress Constraints for Frictional Contact Problems	Control
		YUZIXUAN ZHU, Sieve-SDP: A simple facial reduction algorithm to preprocess SDPs	
		TAKAYUKI OKUNO, A primal-dual path following method for nonlinear semi-infinite SDPs	
		TING KEI PONG, Iteratively reweighted l1 algorithms with extrapolation	
		ANDREAS FISCHER, Local attraction of Newton methods to critical solutions of constrained systems	
		DIMITRI PAPAGEORGIOU, Active Metric Learning for Supervised Classification	
		UBALDO GARCIA PALOMARES, A unified approach for solving mixed integer Box-Constrained optimization	
		CARL GREIFF, Quadratic programming for time-optimal control in differentially flat systems	

Room	Specific Models, Algorithms, and Software - Monday 3:15 PM – 4:45 PM			
FABRE Build J, Z 8 Ground Floor 3x30 min	Distributed Optimization, Organizer: Franck Iutzeler, session 325 FRANCK IUTZELER, Distributed Optimization with Sparse Communications and Structure Identification			Learning
Salle 16 Build I, Z 7 2nd floor 3x30 min	Decisions and learning from data, Chair: Christopher McCord, session 481 CÉDRIC ROMMEL, Gaussian mixture penalization for trajectory optimization problems			Learning
PITRES Build O, Z 8 Ground Floor 3x30 min	Facility Layout, Chair: Anders N Gullhav, session 450 MIRKO DAHLBECK, Combinatorial Bounds for the (extended) Double Row Facility Layout Problem			Logistics
Salle 23 Build G, Z 6 3rd floor 3x30 min	Combinatorial Optimization in Chip Design, Organizer: Stefan Hougardy, session 257 ULRICH BRENNER, Faster Adder Circuits for Inputs with Prescribed Arrival Times			Scheduling
Salle DENUCE Build Q, Z 8 Ground Floor 3x30 min	Progress in Algorithms for Optimal Power Flow Problems I, Organizer: Miguel F Anjos, session 8 MANUEL RUIZ, Solving an Optimal Power Flow (OPF) problem with preventive security constraints			Energy
Salle 24 Build G, Z 6 3rd floor 3x30 min	Topics in power systems, Organizer: Alberto J Lamadrid, session 438 GIULIA DE ZOTTI, Consumers Flexibility Estimation at the TSO Level for Balancing Services			Energy
Salle LA4 Build L, Z 8 Basement 3x30 min	Portfolio Optimization, Chair: Bernardo K. Pagnoncelli, session 393 LUCA MENCARELLI, A Multiplicative Weights Update Algorithm for Portfolio Selection Problems			Sciences
Salle 22 Build G, Z 6 2nd floor 2x30 min	Implementation of interior-point methods for large-scale problems and applications I, Organizer: Jordi Castro, session 353 JOSE HERSKOVITS, A feasible direction interior point algorithm for linear programming			Algo
Salle 18 Build I, Z 7 1st floor 3x30 min	Advances in Linear, Non Linear and Mixed-Integer Optimization, Chair: Hiroshige Dan, session 400 ERIK MÜHMER, Computational Experiments with Nested Dantzig-Wolfe Decompositions			Algo

Room	Discrete Optimization & Integer Programming - Monday 5:00 PM – 6:30 PM			
Salle 34 Build B, Z 3 1st floor 3x30 min	Lattice methods in Integer Optimisation, Organizer: Iskander Aliev, session 78 GENNADIY AVERKOV, Approximation of corner polyhedra with intersection cuts			IPtheory
Salle 44 Build C, Z 1 3rd floor 4x20 min	Data Mining, Chair: Marcus V Poggi, session 504 TAKAHIRO KAN, A weighting local search for huge assignment problems in item recommendation			IPpractice
Salle 36 Build B, Z 4 Intermediate 4x20 min	IP Practice II, Chair: Petra M. Bartmeyer, session 508 GAËL GUILLLOT, Application of the SSSDP method to combinatorial optimisation problems			IPpractice
DURKHEIM Build A, Z 1 3rd floor 3x30 min	Mixed-Integer Conic Optimization, Organizer: Sven Wiese, session 57 LUCAS LETOCART, Exact methods based on SDP for the k-item quadratic knapsack problem			MINLP
Salle 39 Build E, Z 1 3rd floor 3x30 min	Polynomial optimization in binary variables, Organizer: Elisabeth Rodriguez-Heck, session 58 ARNAUD LAZARE, Unconstrained 0-1 polynomial optimization through convex quadratic reformulation			MINLP
Salle 35 Build B, Z 4 Intermediate 3x30 min	MINLP methods in gas transport optimization (II), Organizer: Lars Schewe, session 163 BENJAMIN HILLER, Exploiting acyclic orientations to solve nonlinear potential-based flow problems			MINLP
LEYTEIRE Build E, Z 1 3rd floor 3x30 min	Scheduling and File Migration, Chair: Asaf Levin, session 345 LILIANA GRIGORIU, Scheduling on Uniform Nonsimultaneous Parallel Machines			APPROX
Salle 43 Build C, Z 1 3rd floor 4x20 min	Algorithms for matching markets, Organizer: Amin Saberi, session 467 ARASH ASADPOUR, Concise Bidding Through Dependent Randomized Rounding			APPROX
SIGALAS Build C, Z 2 2nd floor 4x20 min	Combinatorial optimization and convexity, Chair: Yu Yokoi, session 424 YUNI IWAMASA, Discrete convexity in binary VCSs			COMB
Salle 41 Build C, Z 1 3rd floor 4x20 min	Practical aspects of network optimization, Chair: Kai Hoppmann, session 427 SONIA VANIER, Energy-Efficient in Multi-Hop Wireless Networks Problem			COMB

Room	Optimization under Uncertainty - Monday 5:00 PM – 6:30 PM		
Salle 32 Build B, Z 5 Ground Floor 3x30 min	Distributionally Robust Stochastic Programming: Theory and Applications, <i>Organizer:</i> Ran Ji, session 250 YILING ZHANG, Ambiguous Chance-constrained Binary Programs Under Mean-covariance Information		Stoch
Salle 30 Build B, Z 5 Ground Floor 3x20 min	Differentiability, convexity, and modeling in stochastic optimization, <i>Chair:</i> Kai A. Spuerkel, session 493 HOLGER HERTSCH, Stochastic optimization with probabilistic/robust (proburst) constraints	PHILIP KOLVENBACH, Robust optimization of PEDRO PEREZ-AROS, Subdifferential characterization of probability functions	Stoch
DENIGES Build C, Z 5 Ground Floor 3x30 min	Advances in Adjustable Robust Optimization, <i>Organizer:</i> Do Young Yoon, session 350 DICK DEN HERTOOG, Robust optimization for models with uncertain SOC and SDP constraints	ERNST ROOS, Approximation of uncertain convex inequalities	Robust
Salle 37 Build B, Z 4 Intermediate 3x20 min	New models in robust optimization, <i>Chair:</i> Juan S Borrero, session 459 JAEYOUNG LIM, On using cardinality constrained uncertainty for objective coefficients	PHILIP KOLVENBACH, Robust optimization of PDE-constrained problems using second-order methods	Robust
Salle 31 Build B, Z 5 Ground Floor 2x30 min	Learning and dynamic programming, <i>Chair:</i> Boxiao Chen, session 381 MANU GUPTA, A unifying computation of Whittle's Index for Markovian bandits	JOSE NINO-MORA, A verification theorem for indexability of real-state restless bandits	Markov

Room	Continuous Optimization - Monday 5:00 PM – 6:30 PM		
GINTRAC Build Q, Z 8 Ground Floor 3x30 min	Gradient Methods for Constrained Optimization Problems, <i>Organizer:</i> Igor Konnov, session 4 IGOR KONNOV, Simple Adaptive Versions of Iterative Optimization Methods		NLP
Salle 05 Build Q, Z 11 1st floor 4x20 min	Polynomial and tensor optimization III, <i>Organizer:</i> Jiawang Nie, session 7 LEK-HENG LIM, Higher order cone programming	ALEXANDER ZASLAVSKI, Subgradient Projection Algorithm with Computational Errors	NLP
Salle 9 Build N, Z 12 4th floor 3x20 min	Modeling in NLP, <i>Chair:</i> Laura Balzano, session 433 LAURA BALZANO, Low Algebraic Dimension Matrix Completion	KE YE, Ranks and decompositions of Hankel tensors	NLP
Salle 8 Build N, Z 12 4th floor 3x30 min	Extending the Reach of First-Order Methods, Part I, <i>Organizer:</i> Haihao Lu, session 285 BENJAMIN GRIMMER, Subgradient Method Convergence Rates without Lipschitz Continuity or Convexity	MIRAI TANAKA, DC programming algorithm for fully convex bilevel optimization	NonSmooth
Salle 20 Build G, Z 6 1st floor 3x30 min	Solving large scale convex composite programming, <i>Organizer:</i> Kim-Chuan Toh, session 130 KIM-CHUAN TOH, A block symmetric Gauss-Seidel decomposition theorem for convex composite QP	ANNIE RAYMOND, Symmetric Sums of Squares over k-Subset Hypercubes	SDP
Salle LC5 Build L, Z 10 Intermediate 1 3x30 min	Convergence and Approximation in Conic Programming, <i>Chair:</i> Tamás Terlaky, session 465 NURI VANLI, Convergence Rate of Block Coordinate Ascent for Nonconvex Burer-Monteiro Method	YANCHENG YUAN, An Efficient Semismooth Newton Based Algorithm for Convex Clustering	SDP
Salle 06 Build Q, Z 11 1st floor 4x20 min	Nonlinear Optimization and Variational Inequalities VI, <i>Organizer:</i> Cong Sun, session 146 FENGMIN XU, Balance analysis of sparsity and robustness for portfolio adjustment problem	YURIY ZINCHENKO, Towards efficient approximation of p-cones	Variat
Salle ARNOZAN Build Q, Z 8 Ground Floor 4x20 min	Variational Analysis 4, <i>Organizer:</i> Jo A. Brueggemann, session 370 JO BRUEGGEMANN, Path-following method for a class of obstacle problems with integral constraints	CHAO ZHANG, Two-stage stochastic program and stochastic variational inequalities	Variat
Salle KC6 Build K, Z 10 Intermediate 1 3x20 min	Complexity of Randomized Algorithms, <i>Organizer:</i> Raghu Pasupathy, session 347 MARTIN MORIN, On the Convergence of SAGA-like Algorithms	YAKUI HUANG, A family of two-point step-size gradient methods	RandomM
Salle 21 Build G, Z 6 Intermediate 3x30 min	Advances in DFO I, <i>Chair:</i> Sébastien Le Digabel, session 40 WARREN HARE, Calculus Rules of the Simplex Gradient	XIAO WANG, Proximal Stochastic Quasi-Newton methods for Nonconvex Composite Optimization	DerFree
Salle AURIAC Build G, Z 6 1st floor 4x20 min	Advances in optimization methods for time dependent problems:I, <i>Organizer:</i> Matthias Heinkenschloss, session 223 MIHAI ANTESCU, Exponentially convergent receding horizon constrained optimal control	JOHANNES HAUBNER, Shape optimization for unsteady fluid-structure interaction	Control

Room	Specific Models, Algorithms, and Software - Monday 5:00 PM – 6:30 PM			
FABRE Build J, Z 8 Ground Floor 4x20 min	Riemannian geometry in optimization for learning. <i>Organizer:</i> Nicolas Boumal, session 320 Learning NICOLAS BOUMAL, Global rates of convergence for nonconvex optimization on manifolds RONNY BERGMANN, A parallel Douglas-Rachford algorithm for data on Hadamard manifolds PAUL BREIDING, Riemannian optimization for the canonical tensor rank approximation problem JUNYU ZHANG, Primal-Dual Optimization Algorithms over Riemannian Manifolds			
Salle DENUCE Build Q, Z 8 Ground Floor 4x20 min	Exploiting structure in constrained optimization. <i>Organizer:</i> Mihai Cucuringu, session 334 Learning HEMANT TYAGI, Provably robust estimation of modulo 1 samples of a smooth function AKIKO TAKEDA, Efficient DC Algorithm for constrained sparse optimization problems NIKITAS RONTISIS, Distributionally Ambiguous Optimization Techniques for Batch Bayesian Optimizati ANDRE USCHMAJEW, On critical points of quadratic low-rank matrix optimization problems			
Salle 22 Build G, Z 6 2nd floor 4x20 min	Sparsity, variable selection and efficient algorithms. <i>Chair:</i> Alex Sholokhov, session 475 Learning SAM TAJBAKHSH, Distributed algorithms for statistical learning with structured sparsity JEAN PAUPHILET, Sparse regression: Scalable algorithms and empirical performance ALEX SHOLOKHOV, Sparsified Huge-Scale Optimization for Regularized Regression Problems ZIXIN SHEN, Forward stepwise variable selection based on relative weights			
Salle 16 Build I, Z 7 2nd floor 3x20 min	Packing and Capacity Management. <i>Chair:</i> Eugene Zak, session 452 Logistics MARINA ANDRETTA, Solving Irregular Strip Packing Problems with free rotations ALEXANDRE LE JEAN, A 3D-knapsack problem with truncated pyramids and static stability constraint EUGENE ZAK, Minimization of sum of inverse sawtooth functions			
Salle 18 Build I, Z 7 1st floor 4x20 min	Manufacturing. <i>Chair:</i> Younsoo Lee, session 530 Scheduling SÉBASTIEN BERAUDY, Detailed production planning models for semiconductor manufacturing with profit TEUN JANSSEN, Scheduling in the Photolithography Bay HUGO HARRY KRAMER, Column generation and fix-and-optimize for the lot-sizing with remanufacturing YOUNSOO LEE, On the discrete lot-sizing and scheduling problem with sequence-dependent setup			
Salle 23 Build G, Z 6 3rd floor 3x30 min	Novel data-driven OR techniques for power system operations and planning. <i>Organizer:</i> Juan M. Morales, session 52 Energy SALVADOR PINEDA MORENTE, Chronological Time-Period Clustering for Optimal Capacity Expansion Planning CHRISTOS ORDOUDIS, Energy and Reserve Dispatch with Distributionally Robust Joint Chance Constraints JUAN MORALES, Predicting the electricity demand response via data-driven inverse optimization			
Salle 24 Build G, Z 6 3rd floor 3x30 min	Structure and Learning in Power Grid Optimization. <i>Organizer:</i> Deepjyoti Deka, session 135 Energy GAL DALAL, Chance-Constrained Outage Scheduling using a Machine Learning Proxy SIDHANT MISRA, Statistical Learning For DC Optimal Power Flow APURV SHUKLA, Non-Stationary Streaming PCA			
Salle LA4 Build L, Z 8 Basement 3x30 min	Structure from evidence. <i>Organizer:</i> Peter Gritzmman, session 386 Sciences DOUGLAS GONÇALVES, Mathematical Programming in Quantum Information and Computation JORGE BARRERAS, Detection of Uninformed Experts PETER GRITZMANN, On constrained flow and multi assignment problems for plasma particle tracking			
PITRES Build O, Z 8 Ground Floor 3x30 min	Implementation of interior-point methods for large-scale problems and applications II. Algo <i>Organizer:</i> Jordi Castro, session 352 CSABA MESZAROS, On the implementation of the crossover algorithm AURELIO OLIVEIRA, Interior point methods applied to context-free grammar parameter estimation JORDI CASTRO, A new specialized interior-point method for support vector machines			

Room	Discrete Optimization & Integer Programming - Tuesday 8:30 AM – 10:30 AM			
Salle 43 Build C, Z 1 3rd floor 4x30 min	Extended formulations. <i>Organizer:</i> Stefan Weltge, session 219 IPtheory MICHELE CONFORTI, Balas formulation for the union of polytopes is optimal TONY HUYNH, Strengthening Convex Relaxations of 0/1-Sets Using Boolean Formulas MAKRAND SINHA, Lower Bounds for Approximating the Matching Polytope STEFAN WELTGE, Lifting Linear Extension Complexity Bounds to the Mixed-Integer Setting			
Salle 34 Build B, Z 3 1st floor 3x30 min	MIP under Uncertainty 1. <i>Organizer:</i> Fatma Kilinc-Karzan, session 231 IPtheory SHABBIR AHMED, Distributionally Robust Combinatorial Optimization SIMGE KUCUKYAVUZ, Risk-Averse Set Covering Problems RUIWEI JIANG, Mixed-Integer Recourse via Prioritization			
Salle 35 Build B, Z 4 Intermediate 4x30 min	Cutting Planes for Integer Programs. <i>Chair:</i> Matthias Köppe, session 512 IPtheory JIAWEI WANG, Characterization and Approximation of General Dual-Feasible Functions YUAN ZHOU, All finite group complexity injects DANIEL PORUMBEL, Projective cutting-planes by projecting interior points onto polytope facets MATTHIAS KÖPPE, cutgeneratingfunctionology: Python software for CGFs and super-additive duality			
Salle 44 Build C, Z 1 3rd floor 4x30 min	Machine Learning for Optimization. <i>Organizer:</i> Bistra Dilkina, session 138 IPpractice BISTRA DILKINA, Machine Learning for Branch and Bound MARKUS KRUBER, Learning when to use a decomposition ELIAS KHALIL, Learning Combinatorial Optimization Algorithms Over Graphs ANDREA LODI, Learning Discrete Optimization			
LEYTEIRE Build E, Z 1 3rd floor 4x30 min	Streaming. <i>Organizer:</i> Michael Kapralov, session 228 APPROX ERIC PRICE, Counting subgraphs in graph streams DAVID WOODRUFF, Sublinear Time Low Rank Approximation of Positive Semidefinite Matrices PAN PENG, Estimating Graph Parameters from Random Order Streams MICHAEL KAPRALOV, $(1 + \Omega(1))$ -Approximation to MAX-CUT Requires Linear Space			
Salle 36 Build B, Z 4 Intermediate 4x30 min	Approximation Algorithms for Clustering. <i>Organizer:</i> Chaitanya Swamy, session 256 APPROX SARA AHMADIAN, Better Guarantees for k-Means Problem using Primal-Dual Algorithms CHRIS SCHWIEGELSHOHN, On the Local Structure of Stable Clustering Instances BENJAMIN MOSELEY, Approximation Bounds for Hierarchical Clustering CHAITANYA SWAMY, Unifying k-Median and k-Center: Approximation Algorithms for Ordered k-Median			
SIGALAS Build C, Z 2 2nd floor 4x30 min	Matching games and beyond. <i>Organizer:</i> Jochen Koenemann, session 241 COMB ZHUAN KHYE KOH, Stabilizing Weighted Graphs JUSTIN TOH, Computing the Nucleolus of Weighted Cooperative Matching Games in Poly Time JANNIK MATUSCHKE, New and simple algorithms for stable flow problems AGNES CSEH, The complexity of cake cutting with unequal shares			
Salle 41 Build C, Z 1 3rd floor 4x30 min	Equilibrium Computation in Congestion Games. <i>Organizer:</i> Umang Bhaskar, session 242 COMB IOANNIS PANAGEAS, Multiplicative Weights Update with Constant Step-Size in Congestion Games TOBIAS HARKS, Equilibrium Computation in Resource Allocation Games GUIDO SCHÄFER, Computing Efficient Nash Equilibria in Congestion Games UMANG BHASKAR, Equilibrium Computation in Atomic Splittable Routing Games with Convex Costs			
Salle 39 Build E, Z 1 3rd floor 4x30 min	Exact approaches for problems over lattices and graphs. <i>Chair:</i> Daniele Catanzaro, session 425 COMB AUSTIN BUCHANAN, Why is maximum clique often easy in practice? MATTEO COSMI, Scheduling for Last-Mile Food Delivery MARTIN FROHN, Optimizing over lattices of unrooted binary trees: Part I - Foundations DANIELE CATANZARO, Optimizing over lattices of unrooted binary trees: Part II - On the BMEP			
DURKHEIM Build A, Z 1 3rd floor 4x30 min	Graphical Optimization Model 1. <i>Organizer:</i> Joris Kinable, session 295 CP DAVID BERGMAN, On the integrated last mile transportation problem WILLEM-JAN VAN HOEVE, Cut Generation for Integer (Non-)Linear Programming via Decision Diagrams JORIS KINABLE, Hybrid Optimization Methods for Time-Dependent Sequencing Problems JOHN HOOKER, Compact Representation of Near-Optimal Integer Programming Solutions			

Room	Optimization under Uncertainty - Tuesday 8:30 AM – 10:30 AM			
DENIGES Build C, Z 5 Ground Floor 4x30 min	Risk-averse stochastic programming , <i>Organizer:</i> Andrzej Ruszczyński, session 252 DARINKA DENTCHEVA, Asymptotics of stochastic optimization problems with composite risk functionals OZLEM CAVUS, Multi-objective risk-averse two-stage stochastic programming problems ALEXANDER SHAPIRO, Distributionally robust stochastic programming ANDRZEJ RUSZCZYŃSKI, Risk Disintegration with Application to Partially Observable Systems			Stoch
Salle 37 Build B, Z 4 Intermediate 3x30 min	Nonlinear Optimization with Uncertain Constraints , <i>Organizer:</i> Charlie Vanaret, session 110 ANDREAS WAECHTER, Nonlinear programming reformulations of chance constraints (Part 2) ALEJANDRA PENA-ORDIERES, Nonlinear programming reformulations of chance constraints (Part 1) SVEN LEYFFER, Sequential Linearization for Nonlinear Robust Optimization			Robust
Salle 33 Build B, Z 5 Ground Floor 3x30 min	Robust Optimization and Operations Management , <i>Organizer:</i> Chaithanya Bandi, session 410 NIKOS TRICHAKIS, Robustness of Static Pricing Policies in the Face of Strategic Customers OMAR BESBES, Prior-Independent Optimal Auctions CHAITHANYA BANDI, Design and Control of Multi-class Queueing Networks via Robust Optimization			Robust
Salle 31 Build B, Z 5 Ground Floor 4x30 min	Algorithms for stochastic games : new approaches , <i>Organizer:</i> Hugo Gimbert, session 137 MARCIN JURDZINSKI, Quasi-polynomial algorithms for solving parity games ANTONIN KUCERA, One-Counter Stochastic Games with Zero-Reachability Objectives MARCELLO MAMINO, Around tropically convex constraint satisfaction problems. MATEUSZ SKOMRA, The condition number of stochastic mean payoff games			Markov
Salle 30 Build B, Z 5 Ground Floor 4x30 min	Algorithmic Game Theory I , <i>Organizer:</i> Luce Brotcorne, session 311 VICTOR BUCAREY, Solving Strong Stackelberg Equilibrium in Stochastic Games FRÄNK PLEIN, Models for the single-minded bundle pricing problem CONCEPCION DOMINGUEZ, Branch-and-cut algorithm for the Rank Pricing problem YURY KOCHETOV, A matheuristic for the bilevel 0-1 public-private partnership problem			Game

Room	Continuous Optimization - Tuesday 8:30 AM – 10:30 AM			
GINTRAC Build Q, Z 8 Ground Floor 4x30 min	Stochastic and Nonlinear Optimization I , <i>Organizer:</i> Jorge Nocedal, session 47 RAGHU BOLLAPRAGADA, A Progressive Batching L-BFGS Method for Machine Learning LEON BOTTOU, Convexity "à la carte" PHILIP THOMPSON, On variance reduction for stochastic optimization with multiplicative noise FRANK CURTIS, Characterizing Worst-Case Complexity of Algorithms for Nonconvex Optimization			NLP
Salle 05 Build Q, Z 11 1st floor 4x30 min	Machine learning and sparse optimisation , <i>Organizer:</i> Coralie Cartis, session 109 MARTIN LOTZ, Condition numbers and weak average-case complexity in optimization ARMIN EFTEKHARI, A Long (Random) Walk Solves All Your (Linear) Problems FLORENTIN GOYENS, Manifold lifting: problems and methods JARED TANNER, Sparse non-negative super-resolution: simplified and stabilized			NLP
Salle KC7 Build K, Z 10 Intermediate 2 4x30 min	Unconstrained Optimization , <i>Chair:</i> Ekkehard Sachs, session 401 ANDREA CALICIOTTI, SYMMBK algorithm applied to Newton-Krylov methods for unconstrained optimization ELISA RICCIETTI, Regularizing trust-region methods for ill-posed nonlinear least-squares problems MASSIMO ROMA, Approximate Inverse Preconditioning for Newton-Krylov methods EKKEHARD SACHS, Second Order Adjoints			NLP
Salle LC4 Build L, Z 9 Intermediate 1 4x30 min	Advances in Bundle Methods for Convex Optimization , <i>Organizer:</i> Christoph Helmborg, session 93 FRANK FISCHER, An Asynchronous Parallel Bundle Method Based on Inexact Oracles ANTONIO FRANGIONI, Fully Incremental Bundle Methods: (Un)cooperative (Un)faithful Oracles and Upper ELISABETH GAAR, The Bundle Method for Getting an Improved SDP Relaxation of the Stability Number CHRISTOPH HELMBERG, A Dynamic Scaling Approach for Bundle Methods in Convex Optimization			NonSmooth
Salle 8 Build N, Z 12 4th floor 4x30 min	Addressing problems with complex geometries , <i>Organizer:</i> Edouard Pauwels, session 229 JEROME MALICK, Sensitivity analysis for mirror-stratifiable convex functions COURTNEY PAQUETTE, An accelerated proximal method for minimizing compositions of convex functions ANTOINE HOCHART, How to perturb semi-algebraic problems to ensure constraint qualification? EDOUARD PAUWELS, The multiproximal linearization method for convex composite problems			NonSmooth
Salle 20 Build G, Z 6 1st floor 4x30 min	Algebraic and geometric aspects of semidefinite programming , <i>Organizer:</i> Hamza Fawzi, session 85 JAMES SAUNDERSON, Certificates of polynomial nonnegativity via hyperbolic optimization XAVIER ALLAMIGEON, Log-barrier interior point methods are not strongly polynomial AMY WIEBE, Slack ideals of polytopes DOGYOON SONG, Measuring Optimality Gap in Conic Programming Approximations with Gaussian Width			SDP
Salle LC5 Build L, Z 10 Intermediate 1 4x30 min	Theory and algorithms in conic linear programming 1 , <i>Organizer:</i> Gabor Pataki, session 88 HENRY WOLKOWICZ, Low-Rank Matrix Completion (LRMC) using Nuclear Norm (NN) with Facial Reduction NEGAR SOHEILI, Solving conic systems via projection and rescaling HENRIK FRIBERG, Projection and presolve in MOSEK: exponential and power cones LEVENT TUNCEL, TOTAL DUAL INTEGRALITY FOR CONVEX, SEMIDEFINITE, AND EXTENDED FORMULATIONS			SDP
Salle 06 Build Q, Z 11 1st floor 4x30 min	Nonlinear Optimization and Variational Inequalities V , <i>Organizer:</i> Xin Liu, session 145 YAOHUA HU, Lower-order regularization method for group sparse optimization with application TINGTING WU, Solving Constrained TV2L1-L2 MRI Signal Reconstruction via an Efficient ADMM OLEG BURDAKOV, On solving saddle-point problems and non-linear monotone equations JAVAD FEIZOLLAHI, A first-order method for semidefinite stochastic variational inequality problems			Variat
Salle ARNOZAN Build Q, Z 8 Ground Floor 4x30 min	Optimization Algorithms and Variational Inequalities I , <i>Organizer:</i> Bo Jiang, session 148 YU-HONG DAI, Smoothing quadratic regularization method for the hemivariational inequalities DEREN HAN, ADMM for Optimization Problems Involving Nonconvex Functions XINGJU CAI, ADMM-based methods for monotone inverse variational inequalities BO JIANG, Vector Transport-Free SVRG with General Retraction for Riemannian Optimization			Variat
Salle KC6 Build K, Z 10 Intermediate 1 4x30 min	Large Scale and Distributed Optimization , <i>Organizer:</i> Ermin Wei, session 214 PONTUS GISELSSON, On Linear Convergence for Douglas-Rachford splitting and ADMM JONATHAN ECKSTEIN, Block-Iterative and Asynchronous Projective Splitting for Monotone Operators GESUALDO SCUTARI, Achieving Geometric Convergence for Distributed Asynchronous Optimization ERMIN WEI, Asynchronous Distributed Network Newton Method			RandomM
Salle 21 Build G, Z 6 Intermediate 4x30 min	Bayesian and Randomized Optimization II , <i>Chair:</i> Youssef Diouane, session 79 NATHALIE BARTOLI, Adaptive modeling strategy for high-dimensional constrained global optimization ROBERT GRAMACY, Modeling an Augmented Lagrangian for Blackbox Constrained Optimization VICTOR PICHENY, Bayesian optimization under mixed constraints ZI WANG, Bayesian Optimization Guided by Max-values			DerFree
Salle AURIAC Build G, Z 6 1st floor 4x30 min	Optimization Methods for PDE Constrained Problems , <i>Organizer:</i> Michael Ulbrich, session 221 ANTON SCHIELA, An affine covariant composite step method with inexact step computations SEBASTIAN GARREIS, Optimal Control under Uncertainty: Adaptive Solution with Low-rank Tensors CARLOS RAUTENBERG, On the optimal control of quasi-variational inequalities MICHAEL ULBRICH, Inexact bundle methods for nonconvex problems in Hilbert space with applications			Control

Room	Specific Models, Algorithms, and Software - Tuesday 8:30 AM – 10:30 AM			
FABRE Build J, Z 8 Ground Floor 4x30 min	Optimization in Statistical Learning, Organizer: Quentin Berthet, session 326 JONATHAN WEED, Near-linear time approximation algorithms for optimal transport ANDREAS ELSNER, Sharp Oracle Inequalities for nonconvex regularized M-estimators ALEXANDRE D ASPREMONT, Sharpness, Restart and Compressed Sensing Performance FAN YANG, Towards a deeper understanding of generalization for kernel learning			Learning
Salle DENUCE Build Q, Z 8 Ground Floor 4x30 min	Statistics meets optimization: going beyond convexity, Organizer: John Duchi, session 337 MAHDI SOLTANOLKOTABI, Learning ReLUs and over-parameterized neural networks via gradient descent JU SUN, When are nonconvex optimization problems not scary? JOHN DUCHI, Solving composite optimization problems, with applications to phase retrieval an			Learning
Salle 22 Build G, Z 6 2nd floor 4x30 min	Pricing, Chair: Anastasiya Ivanova, session 478 ANASTASIYA IVANOVA, Distributed price adjustment for the resource allocation problem YESMINE ROUIS, Price forecasting with machine learning algorithms for recommerce activities SARA CALLEJA, Volume forecasting with machine learning algorithms for recommerce activities SPYROS ZOUMPOULIS, Optimal Pricing and Introduction Timing of New Virtual Machines			Learning
Salle 18 Build I, Z 7 1st floor 4x30 min	Path and tree problems, Chair: Arthur J Delarue, session 360 ANDREAS KARRENBauer, Approximate Shortest Paths and Transshipment in Distributed and Streaming Models DMYTRO MATSYPURA, Exact IP-based approaches for the longest induced path problem. KIYOSHI SAWADA, Adding Edges of Short Lengths Incident with the Root to Complete K-ary Tree ARTHUR DELARUE, Travel Time Estimation in the Age of Big Data			Network
Salle 16 Build I, Z 7 2nd floor 3x30 min	Facility Location, Chair: Ivan Contreras, session 414 IVAN CONTRERAS, Exact solution of single source quadratic capacitated location problems BLAS PELEGRIN, Optimal multi-facility location for competing firms under quantity competition DANIEL SANTOS, A new formulation for the Hamiltonian p-median problem			Logistics
Salle 23 Build G, Z 6 3rd floor 4x30 min	Electric Vehicles and Decarbonization, Chair: Martim Joyce-Moniz, session 519 PAOLO PISCIELLA, A techno-economic analysis of the impact of decarbonization FRANCISCO MUNOZ, Equilibrium Analysis of a Carbon Tax With Pass-through Restrictions DANIEL OLIVARES, Management of EV Charging Stations under Advance Reservations Schemes MARTIM JOYCE-MONIZ, Increasing electric vehicle adoption via strategic siting of charging stations			Energy
Salle 24 Build G, Z 6 3rd floor 4x30 min	Risk Models for Electricity Markets, Chair: Michael C Ferris, session 521 DANIEL RALPH, Risky Capacity Equilibrium Models for risk averse investment equilibria RYAN CORY-WRIGHT, Payment mechanisms, efficiency savings and risk-aversion in electricity markets FABIO MORET, Risk and Information Sharing in Peer-to-Peer Electricity Markets MICHAEL FERRIS, Dynamic Risked Equilibrium for Energy Planning			Energy
Salle LA4 Build L, Z 8 Basement 4x30 min	Interval Global Optimization, Organizer: Frederic Messine, session 339 TIBOR CSENDES, Nonlinear Symbolic Transformations for Simplifying Functions – Interval Methods BERTRAND NEVEU, An Interval Branch and Bound Algorithm for Parameter Estimation DOMINIQUE MONNET, Interval Branch-and-Bound Algorithm for semi-infinite programming FREDERIC MESSINE, Reliable convex relaxation techniques for interval global optimization codes			Sciences
PITRES Build O, Z 8 Ground Floor 4x30 min	LP, Mixed Integer Convex Programming and Decomposition, Organizer: Thorsten Koch, session 236 MITEN MISTRY, Optimising over Gradient-Boosted Regression Trees with Convex Penalty Functions NIKOLAOS PLOSKAS, An advanced initialization procedure for the simplex algorithm STEPHEN MAHER, Experiments with a general Benders' decomposition framework for SCIP CHRISTIAN PUCHERT, Progress in the Branch-Price-and-Cut Solver GCG			Algo

Room	Invited Talks - Tuesday 11:00 AM – 12:00 AM			
Auditorium Build Symph H, Z 0 Gambetta 1x60 min	Adaptive Robust Optimization with Scenario-wise Ambiguity Sets, Organizer: Daniel Kuhn, session 551 MELVYN SIM, Adaptive Robust Optimization with Scenario-wise Ambiguity Sets			SEMI
DENIGES Build C, Z 5 Ground Floor 1x60 min	Asymptotic Lagrangian duality for nonsmooth optimization, Organizer: Xiaojun Chen, session 541 REGINA BURACHIK, Asymptotic Lagrangian duality for nonsmooth optimization			KEYNOTE
BROCA Build W, Z 0 3rd floor 1x60 min	Lower bounds on the size of linear programs, Organizer: Volker Kaibel, session 545 THOMAS ROTHVOSS, Lower Bounds on the Size of Linear Programs			KEYNOTE

Room	Invited Talks - Tuesday 1:30 PM – 2:30 PM			
Auditorium Build Symph H, Z 0 Gambetta 1x60 min	The Resurgence of Proximal Methods in Optimization, Organizer: Claudia Sagastizabal, session 555 MARC TEBoulLE, The resurgence of proximal methods in optimization			PLENARY

Room	Discrete Optimization & Integer Programming - Tuesday 3:15 PM – 4:45 PM		
Salle 43 Build C, Z 1 3rd floor 3x30 min	MIP under Uncertainty 2. <i>Organizer:</i> Simge Kucukyavuz, session 232 MANISH BANSAL, Two-stage stochastic p-order conic mixed integer programs	WARD ROMEUNDERS, Inexact cutting plane techniques for two-stage stochastic mixed-integer programs	ANDREW SCHAEFER, Solving Stochastic and Bilevel Mixed-Integer Programs via a Generalized Value F.
Salle 44 Build C, Z 1 3rd floor 3x30 min	Symmetry Handling in Integer Programs. <i>Organizer:</i> Christopher Hojny, session 129 CECILE ROTTNER, Breaking full-orbitopal symmetries and sub-symmetries	DOMENICO SALVAGNIN, Symmetry Breaking Inequalities from the Schreier-Sims table	CHRISTOPHER HOJNY, Symmetry Breaking Polytopes: A Framework for Symmetry Handling in Binary Program
DURKHEIM Build A, Z 1 3rd floor 3x30 min	Applications in Mixed-Integer Quadratic Programming. <i>Organizer:</i> Boshi Yang, session 107 BOSHI YANG, Improved Representations of the Quadratic Linear Ordering Problem	AREESH MITTAL, Robust QCQPs Under Mixed Integer Uncertainty	CHIARA LITI, Machine Learning and Optimization for Neuroscience
Salle 34 Build B, Z 3 1st floor 3x30 min	Convex relaxations in MINLP. <i>Organizer:</i> Adam N Letchford, session 278 BORZOU ROSTAMI, A convex reformulation and an outer approximation for a class of BQP	FELIPE SERRANO, Separating over the convex hull of MINLP constraints	ADAM LETCHFORD, Bi-Perspective Cuts for Mixed-Integer Fractional Programs
Salle 35 Build B, Z 4 Intermediate 3x30 min	Applications of MINLP. <i>Organizer:</i> Dolores Romero Morales, session 281 CLAUDIA LÓPEZ, Packing problem as mixed integer non-linear model using formulation space search	STEFFEN REBENNACK, Piecewise Linear Function Fitting via Mixed-Integer Linear Programming	DOLORES ROMERO MORALES, Feature Selection for Benchmarking
LEYTEIRE Build E, Z 1 3rd floor 3x30 min	Algorithms in the Sharing Economy. <i>Organizer:</i> David Shmoys, session 22 ANTHONY KIM, Minimizing Latency in On-line Ride and Delivery Services	ALICE PAUL, Broken Bike Docks and the Prize-Collecting Traveling Salesman Problem	DAVID SHMOYS, Allocating capacity in bike-sharing systems
Salle 36 Build B, Z 4 Intermediate 3x30 min	Local Search and Facility Location. <i>Organizer:</i> Felix Willamowski, session 342 NEELIMA GUPTA, Local Search based Approximation Algorithms for Capacitated k-median problems.	KRZYSZTOF SORNAT, Proportional Approval Voting, Harmonic k-median, and Negative Association	FELIX WILLAMOWSKI, Hard Instances for Local Search via Mixed Integer Programming
Salle 41 Build C, Z 1 3rd floor 3x30 min	New developments in prophet inequalities and related settings. <i>Organizer:</i> Ruben Hoeksma, session 258 ASHISH CHIPLUNKAR, Prophet Inequality and Prophet Secretary	BRENDAN LUCIER, Prophets, Secretaries, and Prices	TIM OOSTERWIJK, Posted Prices and Threshold Strategies for Random Arrivals
Salle 39 Build E, Z 1 3rd floor 3x30 min	Submodular optimization and beyond. <i>Chair:</i> Satoru Iwata, session 418 MARTIN NÄGELE, Submodular Minimization Under Congruency Constraints	KENJIRO TAKAZAWA, The b -bibranching Problem: TDI System, Packing, and Discrete Convexity	SATORU IWATA, Index Reduction via Unimodular Transformations

Room	Optimization under Uncertainty - Tuesday 3:15 PM – 4:45 PM		
Salle 32 Build B, Z 5 Ground Floor 3x30 min	Distributionally Robust and Stochastic Optimization: A Sampling/Scenario Perspective. <i>Organizer:</i> Guzin Bayraksan, session 249 ALEXANDER ZOLAN, Optimizing the Design of a Latin Hypercube Sampling Estimator for SAA	JUN-YA GOTOH, Out-of-sample analysis of distributionally robust optimization	GUZIN BAYRAKSAN, Effective Scenarios in Multistage Distributionally Robust Stochastic Programs
Salle 33 Build B, Z 5 Ground Floor 3x30 min	Recent Advances in Robust Optimization I. <i>Organizer:</i> Phebe Vayanos, session 442 VISHAL GUPTA, Optimization in the Small-Data, Large-Scale Regime	VELBOR MISIC, Interpretable Optimal Stopping	PHEBE VAYANOS, Fair, Efficient, and Interpretable Policies for Allocating Scarce Resources
DENIGES Build C, Z 5 Ground Floor 3x30 min	Recent Advances in Robust Optimization II. <i>Organizer:</i> Wolfram Wiesemann, session 445 JIANZHE ZHEN, A Robust Optimization Perspective on Bilinear Programming	HUAJIE QIAN, Calibrating Optimization under Uncertainty	WOLFRAM WIESEMANN, The Distributionally Robust Chance Constrained Vehicle Routing Problem
Salle 31 Build B, Z 5 Ground Floor 3x30 min	Market places and dynamic programming. <i>Chair:</i> Dan A Iancu, session 380 GONZALO ROMERO, Revenue Management with Repeated Customer Interactions	BOXIAO CHEN, Dynamic Inventory Control with Stockout Substitution and Demand Learning	DAN IANCU, Revenue Losses From Income Guarantees in Centralized Allocation Systems
Salle 30 Build B, Z 5 Ground Floor 3x30 min	Game Theory and Energy Markets. <i>Chair:</i> Didier Aussel, session 375 ANTON SVENSSON, Constraint qualifications for parametrized optimization problems and applications	LÉONARD VONNIEDERHÄUSERN, TrEMa: A Trilevel Energy Market Model	DIDIER AUSSSEL, Electricity market model with elastic demand

Continuous Optimization - Tuesday 3:15 PM – 4:45 PM			
GINTRAC Build Q, Z 8 Ground Floor 3x30 min	Sum-of-squares and moment problems: methods and applications. <i>Organizer:</i> Etienne De Klerk, session 2 AMIR ALI AHMADI, LP, SOCP, and Optimization-Free Approaches to Polynomial Optimization KRZYSZTOF POSTEK, Distributionally robust optimization with SOS polynomial density functions and m		NLP
Salle KC7 Build K, Z 10 Intermediate 2 3x30 min	Bridging NLP and Theoretical Computer Science. <i>Organizer:</i> Aleksander Madry, session 51 ALEKSANDER MADRY, Improved Max Flow and Bipartite Matching Algorithms via Interior Point Method LORENZO ORECCHIA, First-order methods: from dynamical systems to discrete optimization YIN TAT LEE, A homotopy method for lp regression provably beyond self-concordance		NLP
Salle 05 Build Q, Z 11 1st floor 2x30 min	Interior Point Methods in Engineering Applications II. <i>Organizer:</i> Jacek Gondzio, session 61 MICHAL KOCVARA, A multigrid interior point method for large scale topology optimization JACEK GONDZIO, Solving large-scale truss layout optimization problems by a primal-dual IPM		NLP
Salle 9 Build N, Z 12 4th floor 3x30 min	Linear Optimization III. <i>Chair:</i> Rodrigo Mendoza Smith, session 439 RODRIGO MENDOZA SMITH, Neural constraint selection in Linear Programming CHU NGUYEN, New station cone algorithm based on the Bisection and Projection method for POPs KHALID EL YASSINI, A predictor-corrector algorithm for lp problems using the mixed penalty approach		NLP
Salle 8 Build N, Z 12 4th floor 3x30 min	Nonconvex Optimization: Theory and Methods - Part 2. <i>Organizer:</i> Russell Luke, session 186 GUOYIN LI, Splitting methods for nonconvex feasibility problems PATRICK JOHNSTONE, Projective Splitting with Forward Steps RUSSELL LUKE, Convergence Analysis for Nonconvex Optimization Made Easy		NonSmooth
Salle 20 Build G, Z 6 1st floor 3x30 min	Recent Advances in Conic Programming I. <i>Organizer:</i> Makoto Yamashita, session 82 BISSAN GHADDAR, Strong and Cheap SDP and SOCP Hierarchies for Polynomial Optimization SUNYOUNG KIM, BP: a Matlab package based on the Bisection and Projection method for POPs DAVID PAPP, Sum-of-squares optimization with and without semidefinite programming		SDP
Salle LC5 Build L, Z 10 Intermediate 1 3x30 min	Relative Entropy Optimization II. <i>Organizer:</i> Venkat Chandrasekaran, session 112 VENKAT CHANDRASEKARAN, Newton Polytopes and Relative Entropy Optimization TIMO DE WOLFF, Optimization over the Hypercube via Sums of Nonnegative Circuit Polynomials ORCUN KARACA, The REPOP Toolbox: Polynomial Optimization Using Relative Entropy Relaxations		SDP
Salle 06 Build Q, Z 11 1st floor 3x30 min	Nonlinear Optimization and Variational Inequalities III. <i>Organizer:</i> Xin Liu, session 143 XINWEI LIU, A primal-dual IPM with rapid detection on infeasibility for nonlinear programs WEI BIAN, Some discussion on nonsmooth convex regression with cardinality penalty BO WEN, Proximal Algorithms with Extrapolation for Nonconvex Nonsmooth Problems		Variat
Salle KC6 Build K, Z 10 Intermediate 1 3x30 min	Recent Advances in Stochastic and Non-convex Optimization II. <i>Organizer:</i> Mingyi Hong, session 304 TIANBAO YANG, First-order Stochastic Algorithms for Escaping From Saddle Points JOHN BIRGE, Markov chain Monte Carlo methods for Dynamic Stochastic Optimization JONG-SHI PANG, Composite Difference-Max Programs for Modern Statistical Estimation Problems		RandomM
Salle 21 Build G, Z 6 Intermediate 3x30 min	Advances in DFO II. <i>Chair:</i> Warren Hare, session 37 YVES LUCET, Variable-fidelity derivative-free algorithms for road design MATT MENICKELLY, Derivative-Free Robust Optimization by Outer Approximations SÉBASTIEN LE DIGABEL, The Mesh Adaptive Direct Search algorithm for granular and discrete variables		DerFree
Salle AURIAC Build G, Z 6 1st floor 3x30 min	Optimal Control and PDE Constrained Optimization. <i>Organizer:</i> Hasnaa Zidani, session 233 DAMIEN ALLONSUS, Control of semi discretized (in space) systems of parabolic equations. FRANCESCA CHITTARO, Strong local optimality for generalised L^1 optimal control problems ZHENG CHEN, Shortest Dubins Paths through Three Points		Control

Specific Models, Algorithms, and Software - Tuesday 3:15 PM – 4:45 PM			
Salle 16 Build I, Z 7 2nd floor 3x30 min	Distributed and Asynchronous Learning. <i>Organizer:</i> Ion Necoara, session 323 ADITYA DEVARAKONDA, Avoiding communication in first-order methods for convex optimization MARTEN VAN DIJK, On the Expected Convergence of SGD with Large Stepsizes PUYA LATAFAT, Asynchronous primal-dual proximal algorithms for large-scale optimization		Learning
FABRE Build J, Z 8 Ground Floor 3x30 min	Advances in large-scale machine learning. <i>Organizer:</i> Mark Schmidt, session 327 FRANCIS BACH, Exponential convergence of testing error for stochastic gradient methods. VOLKAN CEVHER, Mirrored Langevin Dynamics ZAID HARCHAOUI, Catalyst Acceleration for Gradient-based Optimization of Structured Models		Learning
Salle 22 Build G, Z 6 2nd floor 2x30 min	Learning for mixed integer optimization. <i>Chair:</i> Hari Bandi, session 482 HARI BANDI, Learning a Mixture of Gaussians via Mixed Integer Optimization TAKANORI MAEHARA, Learning for Tuning Parameters of NUOPT MILP Solver		Learning
PITRES Build O, Z 8 Ground Floor 3x30 min	Pricing Methods. <i>Organizer:</i> Rafael Martinelli, session 182 TEOBALDO BULHÕES JÚNIOR, A branch-and-price algorithm for the Minimum Latency Problem JACQUES DESROSNIERS, Pricing, cycles, and pivots RUSLAN SADYKOV, Branch-Cut-and-Price Solver for Vehicle Routing Problems		Logistics
Salle 23 Build G, Z 6 3rd floor 3x30 min	Supply Chain and Lot Sizing. <i>Chair:</i> Simon Thevenin, session 534 SIXIANG ZHAO, Decision Rule-based Method for Flexible Multi-Facility Capacity Planning Problem KEREM AKARTUNALI, Two-Period Relaxations for Big-Bucket Lot-Sizing: Polyhedra and Algorithms SIMON THEVENIN, Scenario based stochastic optimization for the multi-echelon lot-sizing problem		Scheduling
Salle DENUCE Build Q, Z 8 Ground Floor 3x30 min	Equilibrium Modelling in Energy. <i>Organizer:</i> Thomas Kallabis, session 290 MIRIAM AMBROSIOUS, Optimal Price Zones and Investment Incentives in Electricity Markets THOMAS KALLABIS, Strategic generation investment using a stochastic rollinghorizon MPEC approach CHRISTOPH WEBER, Coordination Problems in the Coupling of Gas and Electricity Markets		Energy
Salle 24 Build G, Z 6 3rd floor 3x30 min	Optimization Models for Renewable Energy Integration 2. <i>Chair:</i> Michel Denault, session 523 CRISTINA CORCHERO, A MIP formulation of a Hybrid AC-DC offshore wind power plant topology KRISTINA JANZEN, Optimal Design of a Decentralized Energy Network including Renewable Energies MICHEL DENAULT, Approximate dynamic programming for hydropower optimization		Energy
Salle LA4 Build L, Z 8 Basement 3x30 min	Optimization in Medicine. <i>Organizer:</i> Sebastian Sager, session 394 MANUEL TETSCHKE, Optimizing the individual treatment of patients with polycythemia vera NELSON MACULAN, Combinatorial Problems and Models to Help Prevention and Combat Arboviruses SEBASTIAN SAGER, Towards optimized consolidation (chemo)therapy for acute myeloid leukemia		Sciences
Salle 18 Build I, Z 7 1st floor 3x30 min	Optimization software and applications. <i>Chair:</i> Bartolomeo Stellato, session 399 BARTOLOMEO STELLATO, OSQP: An Operator Splitting Solver for Quadratic Programs NAVJOT KUKREJA, High-level abstractions for checkpointing in PDE-constrained optimisation IVET GALABOVA, A quadratic penalty algorithm for linear programming		Algo

Room	Invited Talks - Tuesday 3:15 PM – 4:45 PM		
SIGALAS Build C, Z 2 2nd floor	A.W. Tucker Prize Session, Chair: Simge Kucukyavuz, session 559		INTERFACE

Room	Discrete Optimization & Integer Programming - Wednesday 8:30 AM – 10:30 AM		
Salle 43 Build C, Z 1 3rd floor 4x30 min	Determinantal structures of IPs, Organizer: Martin Henk, session 131 STEPHAN ARTMANN, Width in congruency-constrained TU-systems.	FRIEDRICH EISENBRAND, Faster algorithms for Integer Programming using the Steinitz Lemma	CHRISTOPH GLANZER, On the number of distinct rows of a matrix with bounded sub-determinants IPtheory
Salle 35 Build B, Z 4 Intermediate 4x30 min	Advances in Integer Programming, Organizer: Santanu S Dey, session 230 SANJEEB DASH, A generalization of Gomory-Chvatal cuts	BURAK KOCUK, Integer Programming Techniques for Optimal Transmission Switching Problems	ALEJANDRO TORIELLO, Time-indexed Relaxations for the Online Bipartite Matching Problem LAURENCE WOLSEY, Constant Capacity Flow Cover Inequalities on a Path or a Variant of Lot-Sizing IPtheory
Salle 42 Build C, Z 1 3rd floor 4x30 min	Primal Algorithms for Integer Programming Problems, Organizer: Daniel Aloise, session 338 ADIL TAHIR, Integral Column Generation Algorithm for Set Partitioning Type Problems	OMAR FOUTLANE, Distributed Integral Simplex Using Decomposition for Set Partitioning Problems	ILYAS HIMMICH, A Polyhedral Study of the Shortest Path Problem with Resource Constraints DANIEL ALOISE, A scalable algorithm for the solution of large clustering problems IPtheory
Salle 44 Build C, Z 1 3rd floor 4x30 min	Benders Decomposition for Combinatorial and Bilevel Optimization, Organizer: Fabio Furini, session 171 ARTHUR MAHÉO, A Framework for Benders with Integer Sub-Problem	PAOLO PARONUZZI, New ILP formulations for the k-Vertex Cut Problem	IVANA LJUBIC, Decomposition Approaches to Covering Location Problems FABIO FURINI, The Maximum Clique Interdiction Game IPpractice
Salle 34 Build B, Z 3 1st floor 3x30 min	MINLP (I), Organizer: Daniel Bienstock, session 65	BACHIR EL KHADIR, Time-Varying Semidefinite Programs	KURT ANSTREICHER, Strengthened Relaxations for Quadratic Optimization with Switching Variables JAMES RENEGAR, A Simple Nearly-Optimal Restart Scheme For Speeding-Up First Order Methods MINLP
LEYTEIRE Build E, Z 1 3rd floor 4x30 min	Approximation Algorithms for the Traveling Salesman Problem, Organizer: Anke van Zuylen, session 23 STEPHAN HELD, Vehicle Routing with Sub-tours	KENT QUANRUD, Fast Approximations for Metric TSP	JENS VYGEN, The s - t -path TSP: past, present, and future ANGE VAN ZUYLEN, The Salesman's Paths: Layered Christofides' Trees, Deletion and Matroids APPROX
Salle 36 Build B, Z 4 Intermediate 4x30 min	Approximation Algorithms for Scheduling Problems, Organizer: Nicole Megow, session 72 RUBEN HOEKSMMA, The general scheduling problem with uniform release dates is not APX-hard	CLIFFORD STEIN, Minimizing Maximum Flow Time on Related Machines via Dynamic Pricing	SVEN JÄGER, Generalizing the Kawaguchi-Kyan Bound to Stochastic Parallel Machine Scheduling JULIAN MESTRE, Precedence-Constrained Min Sum Set Cover APPROX
Salle 41 Build C, Z 1 3rd floor 4x30 min	Discrete Convex Analysis, Organizer: Akiyoshi Shioura, session 243 AKIYOSHI SHIOURA, M-convex Function Minimization under L1-distance Constraint	ERIC BALKANSKI, On the Construction of Substitutes	FABIO TARDELLA, Discrete Midpoint Convexity SATOKO MORIGUCHI, Scaling, proximity, and optimization of integrally convex functions COMB
Salle 39 Build E, Z 1 3rd floor 4x30 min	Optimization under uncertainty, Organizer: Marco Molinaro, session 261 WILLIAM UMBOH, Online Probabilistic Metric Embedding and its Applications	RAVISHANKAR KRISHNASWAMY, Online and Dynamic Algorithms for Set Cover	SAHIL SINGLA, Algorithms and Adaptivity Gaps for Stochastic Probing MARCO MOLINARO, Online and Random-order Load Balancing Simultaneously COMB
DURKHEIM Build A, Z 1 3rd floor 4x30 min	Learning in CP, Organizer: Arnaud Lallouet, session 301 NADJIB LAZAAR, Constraint acquisition	ARNAUD LALLOUET, Reasoning with Learned Constraints	ARNAUD GOTLIEB, Boundary Estimation: Learning Boundaries for Constraint Optimization Problems MICHELA MILANO, Empirical Model Learning: boosting optimization through machine learning CP

Room	Optimization under Uncertainty - Wednesday 8:30 AM – 10:30 AM		
DENIGES Build C, Z 5 Ground Floor 4x30 min	Chance Constraint and Its Applications, Organizer: Jianqiang Cheng, session 253 ABDEL LISSER, Joint chance constrained general sum games	JIA LIU, Distributionally robust geometric programs with chance constraints	FRANCESCA MAGGIONI, Bounds for probabilistic constrained problems JIANQIANG CHENG, Partial Sample Average Approximation Method for Chance Constrained Problems Stoch
Salle 32 Build B, Z 5 Ground Floor 3x30 min	Sampling and stability in stochastic optimization, Chair: Harsha Honnappa, session 488 EDWARD ANDERSON, Distributional Robustness and Sample Average Approximation	MATTHIAS CLAUS, On stability of stochastic bilevel programs with risk aversion	GERARD CORNUEJOLS, From Estimation to Optimization via Shrinkage Stoch
Salle 37 Build B, Z 4 Intermediate 4x30 min	Interfaces of Applied Probability and Optimization, Organizer: Omar El Housni, session 409 JULIEN GRAND CLEMENT, Robust Markov Decision Process: Beyond (and back to) Rectangularity	OMAR EL HOUSNI, Beyond Worst-case: A Probabilistic Analysis of Affine Policies	OMID NOHADANI, Sustainable Inventory With Robust Periodic-affine Policies and Med. Supply Chains KARTHIK NATARAJAN, Distributionally Robust Markovian Traffic Equilibrium Robust
Salle 33 Build B, Z 5 Ground Floor 4x30 min	Robust combinatorial optimization IV, Chair: Arie Koster, session 449 PEDRO MUNARI, The vehicle routing problem under uncertainty via robust optimization	MARINA LEAL, A time-dependent version of the robust TSP and SPP.	ARIE KOSTER, Scheduling Jobs under Uncertainty: A Customer-oriented Approach ROBERTO WOLFLER CALVO, Optimizing the electricity production planning with stochastic outage durations Robust
Salle 30 Build B, Z 5 Ground Floor 4x30 min	Risk and Financial Markets, Chair: Markku J Kallio, session 377 STEFANO NASINI, Bilevel programming approach for investment strategies under intermediation	YANG ZHAN, A smooth path-following method for computing equilibria in incomplete markets	MARKKU KALLIO, Cooperative Mitigation of Contagion in Financial Networks ZHENYU HU, Stable Risk Sharing and Its Monotonicity Game

Continuous Optimization - Wednesday 8:30 AM – 10:30 AM				
Room				
GINTRAC Build Q, Z 8 Ground Floor 4x30 min	Stochastic and Nonlinear Optimization III, Organizer: Jorge Nocedal, session 31			
	FRED ROOSTA, Efficient Newton-type methods for non-convex machine learning problems	JORGE NOCEDAL, Optimization Methods for Training Neural Networks	STEPHEN WRIGHT, A Newton-CG Method with Complexity Guarantees	UDAY SHANBHAG, Smoothed Variable Sample-size Acc. Prox. Methods for Stoch. Convex Optimization
Salle 05 Build Q, Z 11 1st floor 4x30 min	Optimality conditions in NLP and conic problems, Organizer: Roberto Andreani, session 43			
	ROBERTO ANDREANI, A SEQUENTIAL OPTIMALITY CONDITION RELATED TO THE QUASINORMALITY CQ	GABRIEL HAESER, An extension of Yuan's Lemma and its applications in optimization	LUIS FELIPE BUENO, Optimality Conditions for Generalized Nash Equilibrium Problems	TATIANA TCHEMISOVA, On Optimality Conditions for Linear Copositive Programming
Salle KC7 Build K, Z 10 Intermediate 2 4x30 min	Computational advances in NLP, Chair: Jeffrey CH Pang, session 434			
	ALFONSO LOBOS RUIZ, Optimal Bidding, Allocation, and Budget Spending for a Demand-Side Platform.	JEFFREY PANG, Distributed deterministic asynchronous optimization using Dykstra's splitting	ZHENING LI, Decompositions and optimizations of symmetric conjugate complex forms	MAX GONCALVES, An inexact Newton-like conditional gradient method for constrained systems
Salle 9 Build N, Z 12 4th floor 4x30 min	Fixed Point Approaches, Chair: Poom Kumam, session 435			
	KONRAWUT KHAMMAHAWONG, Convergence analysis of S-iteration process for discontinuous operators	POOM KUMAM, A new algorithms for split feasibility problems involving paramonotone equilibria	KHANTIN MUANGCHOO-IN, Fixed point and convergence theorems for monotone (α, β) -nonexpansive	WUDTHICHAI ONSOD, Monotone generalized almost contraction on weighted graph
Salle LC4 Build L, Z 9 Intermediate 1 4x30 min	Recent advances in first-order algorithms for non-smooth optimization, Organizer: Thomas Pock, session 198			
	PETER OCHS, Non-smooth Non-convex Bregman Minimization: Unification and new Algorithms	YURA MALITSKY, Primal-dual algorithm for linearly constrained optimization problem	MATTHIAS EHRHARDT, Stochastic PDHG with Arbitrary Sampling and Applications to Medical Imaging	STANISLAV MAZURENKO, Acceleration and global convergence of the NL-PDHGM
Salle 8 Build N, Z 12 4th floor 4x30 min	Dynamical Systems and Optimization, Organizer: Hedy Attouch, session 351			
	RADU IOAN BOT, The continuous proximal-gradient approach in the nonconvex setting	ALEXANDRE CABOT, Accelerated Forward-Backward Algorithms	JUAN PEYPOUQUET, Inertial proximal algorithms for maximally monotone operators	SILVIA VILLA, A dual diagonal iterative regularization method
Salle AURIAC Build G, Z 6 1st floor 4x30 min	Recent Advances in Conic Programming II, Organizer: Sena Safarina, session 83			
	RUJUN JIANG, Convex Relaxations for Nonconvex Quadratically Constrained Quadratic Program	SENA SAFARINA, Cone Decomposition Method for Mixed-Integer SOCP arising from tree breeding	GORAN BANJAC, Infeasibility detection in ADMM for convex optimization	MARTA CAVALEIRO, A Simplex-like algorithm for the infimum point w.r.t. the second order cone
Salle 20 Build G, Z 6 1st floor 4x30 min	Theory and algorithms in conic linear programming 2, Organizer: Gabor Pataki, session 89			
	MASAKAZU MURAMATSU, An extension of Chubanov's algorithm to symmetric cone programming	JOACHIM DAHL, Extending MOSEK with exponential cones	STEFAN SREMAC, Primal Facial Reduction in Semidefinite Programming and Matrix Completions	BRUNO LOURENCO, Amenable cones: bridging error bounds and facial reduction
Salle LC5 Build L, Z 10 Intermediate 1 4x30 min	New trends II, Chair: Frank Permenter, session 500			
	CLAUDIA ADAMS, An L^2 -approach to Copositivity	FAIZAN AHMED, On algorithms to optimize homogeneous polynomial over the simplex and the sphere	JOHN MITCHELL, Complementarity formulations of rank minimization problems	FRANK PERMENTER, Interior-point methods via the exponential map
Salle 06 Build Q, Z 11 1st floor 2x30 min	Stochastic Optimization and Variational Inequalities II, Organizer: Alejandro R. Jofre, session 156			
			YUEYUE FAN, How does uncertainty of demand propagate to flows under network equilibrium	ALEJANDRO JOFRE, Variance-based stochastic extragradient methods with linear search for Stoch. VI
Salle ARNOZAN Build Q, Z 8 Ground Floor 4x30 min	Variational Analysis 1, Organizer: Samir Adly, session 364			
	ALEXANDRA SCHWARTZ, Second Order Optimality Conditions for Cardinality Constrained Problems	HELMUT GFRERER, Stability Analysis for Parameterized Equilibria with Conic Constraints	MICHEL THERA, Stability and Sensitivity Analysis of Parametrized Optimization Problems	SAMIR ADLY, Sensitivity analysis of parameterized nonlinear variational inequalities.
Salle KC6 Build K, Z 10 Intermediate 1 4x30 min	First Order Methods for Non-Smooth Constrained Optimization, Organizer: Qihang Lin, session 305			
	SHIQIAN MA, On the Non-Ergodic Convergence Rate of an Inexact Augmented Lagrangian Framework	SELVAPRABU NADARAJAH, A level-set method for stochastic optimization with expectation constraints	PENG ZHENG, Fast method for non-smooth non-convex minimization	DAOLI ZHU, Stochastic Primal-Dual Coordinate Method for Nonlinear Convex Cone Programs
Salle 21 Build G, Z 6 Intermediate 4x30 min	New derivative-free algorithms, Chair: Margherita Porcelli, session 34			
	MARGHERITA PORCELLI, Gray-box optimization of structured problems and other new developments in BFO	FRANCESCO RINALDI, Model-based derivative-free methods for nonsmooth black-box functions	LINDON ROBERTS, A flexible, robust and efficient derivative-free solver for least squares	ANA CUSTODIO, MultiGLODS: Clever Multistart in Multiobjective Directional Direct Search

Room	Specific Models, Algorithms, and Software - Wednesday 8:30 AM – 10:30 AM			
Salle 16 Build I, Z 7 2nd floor 3x30 min	First-Order Methods for Machine Learning , <i>Organizer:</i> Fabian Pedregosa, session 319		Learning	
	NICOLAS FLAMMARION, Stochastic Composite Least-Squares Regression with convergence rate $O(1/n)$	FABIAN PEDREGOSA, Adaptive Three Operator Splitting	SEBASTIAN STICH, Approximate Composite Minimization: Convergence Rates and Examples	
FABRE Build J, Z 8 Ground Floor 4x30 min	Structured Optimization for Machine Learning and Signal Processing , <i>Organizer:</i> Lin Xiao, session 330		Learning	
	DONALD GOLDFARB, Training neural networks using ADMM for multiaffine constraint	XINHUA ZHANG, Generalized Conditional Gradient for Structured Sparsity and Convex Deep Network	LIEVEN VANDENBERGHE, Proximal methods for optimization over nonnegative trigonometric polynomials	MIKAEL JOHANSSON, Fast convex optimization for eigenproblems and beyond
Salle 18 Build I, Z 7 1st floor 4x30 min	Robust network optimization , <i>Organizer:</i> Dimitri Papadimitriou, session 357		Network	
	JOE NAOUM-SAWAYA, Decomposition Approach for Robust Network Interdiction	VARUN REDDY, Robust network slice design under correlated demand uncertainties	XUDONG HU, Equilibria for Robust Routing of Atomic Players	DIMITRI PAPADIMITRIOU, Reliable Multi-level Facility Location Problem (MFLP)
Salle DENUCE Build Q, Z 8 Ground Floor 4x30 min	Decomposition Techniques to Solve Large-Scale Optimization Problems for Electricity and Natural Gas Systems , <i>Organizer:</i> Ramteen Sioshansi, session 136			Energy
	JEAN-PAUL WATSON, Toward Scalable Stochastic Economic Dispatch on an Industrial-Scale Model	DAVID POZO, Distributionally Robust Transmission Expansion Planning	GERRIT SLEVOGT, Structures and algorithms for nomination validation in steady-state gas networks	GIORGIA OGGIONI, A bilevel model for the waste-to-energy supply chain in a circular economy
Salle 23 Build G, Z 6 3rd floor 4x30 min	Energy-aware planning and scheduling 1 , <i>Organizer:</i> Sandra U. Ngueveu, session 177		Energy	
	SOPHIE DEMASSEY, Robust optimisation of storage in a power generation expansion planning problem	PETER PFLAUM, Microgrid Energy Flexibility Optimization – 3 use cases	PAOLO GIANESSI, ILP models for the job-shop scheduling problem with energy consideration	SANDRA U. NGUEVEU, Decomposition method in a scheduling problem with energy storage and costs
Salle 24 Build G, Z 6 3rd floor 4x30 min	Distribution and Demand Flexibility , <i>Chair:</i> Golbon Zakeri, session 510		Energy	
	ALEJANDRO ANGULO, A Data-Driven Robust Power Management in Active Distribution Systems	ANJA HÄHLE, Exploiting Flexibility in Loads for Balancing Power in Electrical Grids	PAULIN JACQUOT, Analysis of a Routing Game Model for Demand Side Management	GOLBON ZAKERI, Demand response in electricity markets
Salle LA4 Build L, Z 8 Basement 3x30 min	Energy markets , <i>Organizer:</i> Martine Labbé, session 50		Sciences	
	BERNARD FORTZ, Unit Commitment under Market Equilibrium Constraints	MARTIN SCHMIDT, The Impact of Physics on Market Equilibria in Energy Networks	MARTINE LABBÉ, Dynamic programming approach for bidding problems on day-ahead markets	
PITRES Build O, Z 8 Ground Floor 3x30 min	Progress in MIP Solvers I , <i>Organizer:</i> Michael Winkler, session 235		Algo	
	IMRE POLIK, New features and improvements in the SAS/OR optimization package	THORSTEN KOCH, MIPLIB 2017+1	HANS MITTELMANN, Benchmarks of commercial and noncommercial optimization software	
Salle 22 Build G, Z 6 2nd floor 4x30 min	Numerically Efficient Methods for Piecewise Algorithmic Differentiation I , <i>Organizer:</i> Torsten F Bosse, session 269		Algo	
	SRI HARI NARAYANAN, Study of the numerical efficiency of structured abs-normal forms	TORSTEN BOSSE, (Almost) Matrix-free solver for piecewise linear functions in Abs-Normal form	ANDREAS GRIEWANK, An active signature method for piecewise differentiable/linear optimization.	ANGEL ROJAS, Solving l_1 regularized minimax problems by successive piecewise linearization

Room	Invited Talks - Wednesday 8:30 AM – 10:30 AM			
SIGALAS Build C, Z 2 2nd floor 4x30 min	Stochastic optimization , <i>Chair:</i> Alexei A. Gaivoronski, session 314		INTERFACE	
	BERNARDO COSTA, Using disjunctive programming to represent Risk Aversion policies	ANTHONY DOWNWARD, SDDP with stagewise-dependent objective coefficient uncertainty	ALEXEI GAIVORONSKI, Stochastic optimization of simulation models: management of	KAZEM ABBASZADEH, Demand Response To Electricity Prices In Flexible Manufacturing

Room	Invited Talks - Wednesday 11:00 AM – 12:00 AM			
Auditorium Build Symp H, Z 0 Gambetta 1x60 min	Insights via volumetric comparison of polyhedral relaxations , <i>Organizer:</i> Andrea Lodi, session 548			SEMI
	JON LEE, Insights via volumetric comparison of polyhedral relaxations			
BROCA Build W, Z 0 3rd floor 1x60 min	Monotone Operator Theory in Convex Optimization , <i>Organizer:</i> Samir Adly, session 537			KEYNOTE
	PATRICK COMBETTES, Monotone Operator Theory in Convex Optimization			
DENIGES Build C, Z 5 Ground Floor 1x60 min	Online Competitive Algorithms for Resource Allocation , <i>Organizer:</i> Frank E. Curtis, session 539			KEYNOTE
	MARYAM FAZEL, Online Competitive Algorithms for Resource Allocation			
LEYTEIRE Build E, Z 1 3rd floor 1x60 min	Model-Based Methods, Sampling Models, and A New Second-Order Model-Based Method , <i>Organizer:</i> Stefan M Wild, session 546			KEYNOTE
	LUIS NUNES VICENTE, Model-Based Methods, Sampling Models, and A New Second-Order Model-Based Method			

Room	Invited Talks - Wednesday 1:30 PM – 2:30 PM			
Auditorium Build Symp H, Z 0 Gambetta 1x60 min	Relaxations and Approximations of Chance Constraints , <i>Organizer:</i> Simge Kucukyavuz, session 525			PLENARY
	SHABBIR AHMED, Relaxations and Approximations of Chance Constraints			

Room	Discrete Optimization & Integer Programming - Wednesday 3:15 PM – 4:45 PM		
Salle 44 Build C, Z 1 3rd floor 3x30 min	Knapsack Problems, Organizer: Enrico Malaguti, session 185 ASHWIN ARULSELVAN, Algorithms for bilevel knapsack problem		IPpractice
Salle 36 Build B, Z 4 Intermediate 3x30 min	Decomposition I, Chair: Dieter Weninger, session 486 KEREM BULBUL, Benders Decomposition and Column-and-Row Generation for LPs w/Column-Dependent Rows		IPpractice
DURKHEIM Build A, Z 1 3rd floor 3x30 min	Decomposition methods for MINLP, Organizer: Ivo Nowak, session 55 IVO NOWAK, Decomposition-based Successive Approximation Methods for MINLP		MINLP
Salle 34 Build B, Z 3 1st floor 3x30 min	MINLP (II), Organizer: Daniel Bienstock, session 66 AKSHAY GUPTA, Polyhedral relaxations for nonconvex quadratic functions		MINLP
Salle 35 Build B, Z 4 Intermediate 3x30 min	MINLP for Data Science, Organizer: Vanesa Guerrero, session 108 SANDRA BENÍTEZ-PEÑA, Cost-sensitive SVM		MINLP
LEYTEIRE Build E, Z 1 3rd floor 3x30 min	Clustering, Organizer: Mohammad R Salavatipour, session 30 ARAVINDAN VIJAYARAGHAVAN, Clustering Mixtures of Well-Separated Gaussians		APPROX
Salle 43 Build C, Z 1 3rd floor 3x30 min	Network Design and Routing, Chair: Yuko Kuroki, session 346 YUSA MATSUDA, A 4-approximation algorithm for k -prize collecting Steiner tree problems		APPROX
Salle 41 Build C, Z 1 3rd floor 3x30 min	Variants of the Assignment problem, Organizer: Kavitha Telikepalli, session 266 TOBIAS MÖMKE, Approximating Airports and Railways		COMB
Salle 39 Build E, Z 1 3rd floor 3x30 min	Polyhedral aspects of combinatorial optimization problems, Chair: Guillaume Duvillié, session 404 SHUNGO KOICHI, A polyhedral insight into covering a $2/3$ supermodular function by a graph		COMB

Room	Optimization under Uncertainty - Wednesday 3:15 PM – 4:45 PM		
Salle 32 Build B, Z 5 Ground Floor 3x30 min	Learning and Stochastic Programming, Organizer: Matthias Poloczek, session 254 JUNYI LIU, Asymptotic Results For Two-stage Stochastic Quadratic Programming		Stoch
DENIGES Build C, Z 5 Ground Floor 3x30 min	Dynamic Optimization: Theory and Algorithms, Organizer: Vineet Goyal, session 100 SHIMRIT SHTERN, A Scalable Algorithm for Two-Stage Adaptive Linear Optimization		Robust
Salle 37 Build B, Z 4 Intermediate 3x30 min	Cursing the Dimensionality: Two-Stage and Multi-Stage Robust Optimization, Organizer: Angelos Tsoukalas, session 443 CHIN PANG HO, Efficient Algorithms for Robust MDPs with State Rectangularity		Robust
Salle 31 Build B, Z 5 Ground Floor 2x30 min	Dynamic programming applications, Chair: Susanne Hoffmeister, session 379 SUSANNE HOFFMEISTER, Markov Decision Processes for Sport Strategy Optimization		Markov
Salle 30 Build B, Z 5 Ground Floor 3x30 min	Nonconvex and Complex Problems in Multiobjective Optimization, Chair: Gabriele Eichfelder, session 268 GABRIELE EICHFELDER, A Trust Region Method for Heterogeneous Multiobjective Optimization		Game

Continuous Optimization - Wednesday 3:15 PM – 4:45 PM				
Room				
GINTRAC Build Q, Z 8 Ground Floor 3x30 min	The power and limits of the Lasserre hierarchy. <i>Organizer:</i> Markus Schweighofer, session 9 STANDA ZIVNY, The power and limits of convex relaxations for general-valued CSPs ADAM KURPISZ, On the convergence of the Lasserre/SoS hierarchy for 0/1 optimization problems. MONALDO MASTROLILLI, High Degree SOS Proofs, Bienstock-Zuckerberg hierarchy and Chvatal-Gomory cuts			NLP
Salle 05 Build Q, Z 11 1st floor 3x30 min	Subspace methods in NLP I. <i>Organizer:</i> Michal Kocvara, session 45 ZAIKUN ZHANG, A Space Transformation Framework for Nonlinear Optimization: Part I SERGE GRATTON, A Space Transformation Framework for Nonlinear Optimization: Part II FRANCISCO SOBRAL, Quasi-Newton and the Unreduced Matrix in Interior Point Methods			NLP
Salle 9 Build N, Z 12 4th floor 3x30 min	Quadratic Optimization. <i>Chair:</i> Anders Forsgren, session 417 DAVID EK, On limited-memory quasi-Newton methods for minimizing a quadratic function ANDERS FORSGREN, On degeneracy in active-set methods for linear and convex quadratic programming FERNANDA RAUPP, An algorithm for projecting a point onto a level set of a quadratic function			NLP
Salle 8 Build N, Z 12 4th floor 3x30 min	Adaptivity in non-smooth optimization. <i>Organizer:</i> Volkan Cevher, session 187 OLIVIER FERCOQ, Adaptive Double Loop Smoothing Algorithms KFIR LEVY, Universal Acceleration through Learning Rate Adaptation STEPHEN BECKER, ADMM vs gradient methods for ill-conditioned imaging problems			NonSmooth
Salle 20 Build G, Z 6 1st floor 3x30 min	SDP approaches to combinatorial and global optimization problems. <i>Organizer:</i> Etienne De Klerk, session 15 SAMUEL GUTEKUNST, Semidefinite Programming Relaxations of the Traveling Salesman Problem HAO HU, On Solving the Quadratic Shortest Path Problem. AHMADREZA MARANDI, SDP relaxations of polynomial optimization problems with chordal structure			SDP
Salle LC5 Build L, Z 10 Intermediate 1 3x30 min	Reformulation-based solution methods for quadratic programming. <i>Organizer:</i> Dominique Quadri, session 215 ERIC SOUTIL, Non-convex Quadratic Integer Programming : a piecewise linearization HADRIEN GODARD, Solving Alternative Current Optimal Power Flow to global optimality SOUROUR ELLOUMI, Preprocessing and reformulation for the Quadratic Assignment Problem			SDP
Salle 06 Build Q, Z 11 1st floor 3x30 min	Optimization Algorithms and Variational Inequalities II. <i>Organizer:</i> Xiaoqi Yang, session 150 XIAOQI YANG, On Error Bound Moduli for Locally Lipschitz and Regular Functions MIN LI, Inexact primal-dual hybrid gradient methods for saddle-point problems KUANG BAI, On directional pseudo/quasinormality and directional enhanced KKT conditions			Variat
Salle ARNOZAN Build Q, Z 8 Ground Floor 3x30 min	Nash equilibrium and games 1. <i>Organizer:</i> Lorenzo Lampariello, session 365 ANNA THÜNEN, Solving Multi-Leader-Follower Games JACQUELINE MORGAN, Nash equilibrium: uniqueness and approximation via continuous optimization MAURO PASSACANTANDO, Fixed point and extragradient algorithms for quasi-equilibria			Variat
Salle KC6 Build K, Z 10 Intermediate 1 3x30 min	Fast Converging Stochastic Optimization Algorithms. <i>Organizer:</i> Francis Bach, session 213 AYMERIC DIEULEVEUT, Bridging the Gap between Constant Step Size SGD and Markov Chains AUDE GENEVAY, Stochastic Optimization for Large Scale Optimal Transport ROBERT GOWER, Variance Reduced Methods via Sketching			RandomM
Salle 21 Build G, Z 6 Intermediate 3x30 min	Surrogate-based algorithms for constrained derivative-free problems. <i>Chair:</i> Phillippe R. Sampaio, session 126 MANUEL RAMOS-CASTILLO, Optimal agricultural scheduling through MINLP surrogate-based optimization PHILLIPE SAMPAIO, A global optimization algorithm for derivative-free constrained problems GEOVANI GRAPIGLIA, Derivative-Free Trust-Region Algorithms for L1, Minimax and Bi-Objective Optimiz			DerFree
Salle AURIAC Build G, Z 6 1st floor 3x30 min	Risk-Averse PDE-Constrained Optimization—Methods and Applications. <i>Organizer:</i> Harbir Antil, session 222 RUEDIGER SCHULTZ, Stochastic Dominance in Elastic Shape Optimization HARBIR ANTIL, Weighted Sobolev Spaces with Application to Image Processing DREW KOURI, Smoothing Techniques for Risk-Averse PDE-Constrained Optimization			Control

Room	Specific Models, Algorithms, and Software - Wednesday 3:15 PM – 4:45 PM		
Salle DENUCE Build Q, Z 8 Ground Floor 3x30 min	Second order methods for training ML models , <i>Chair</i> : Julien Mairal, session 474 AMIR ABDESSAMAD, Newton method with an adjusted generalized Hessian matrix for SVMs JULIEN MAIRAL, A Variable Metric Inexact Proximal Point Algorithm for Quasi-Newton Acceleration ROBERT MOHR, An Adaptive Sample Size Trust-Region Method for Empirical Risk Minimization		Learning
FABRE Build J, Z 8 Ground Floor 3x30 min	Convex optimization, distances and constraints , <i>Chair</i> : Pablo A Parrilo, session 476 PAVEL DVURECHENSKY, Computational Optimal Transport: Accelerated Gradient Descent vs Sinkhorn PABLO PARRILO, Geodesic distance maximization ADIL SALIM, A Splitting Algorithm for Minimization under Stochastic Linear Constraints		Learning
Salle 16 Build I, Z 7 2nd floor 3x30 min	Rail and Maritime Transportation , <i>Chair</i> : Kazuhiro Kobayashi, session 454 KAZUHIRO KOBAYASHI, Accelerated column generation for a ship routing problem with speed optimization STANLEY SCHADE, Column Generation in Railway Optimization TATSUKI YAMAUCHI, Optimizing Train Stopping Patterns for Congestion Management		Logistics
Salle 18 Build I, Z 7 1st floor 3x30 min	Scheduling in Networks , <i>Chair</i> : Hamish Waterer, session 532 GRATIEN BONVIN, Global optimization for the pump scheduling problem in drinking water networks AMADEU COCO, Addressing a scheduling problem for planned disruptions on urban road networks HAMISH WATERER, Scheduling of maintenance windows in a mining supply chain railway network		Scheduling
Salle 23 Build G, Z 6 3rd floor 3x30 min	Conic Optimization and Power Systems , <i>Organizer</i> : Jakub Marecek, session 68 ARVIND RAGHUNATHAN, Degeneracy in Chordal Decomposition of Semidefinite Programs JAKUB MARECEK, When to switch from a convex relaxation to Newton's method on the non-convex POP KONSTANTIN TURITSYN, Convex restrictions of power flow feasibility sets		Energy
Salle 24 Build G, Z 6 3rd floor 2x30 min	Emerging Energy Markets , <i>Organizer</i> : Dennice F. Gayme, session 291 MARYAM KAMGARPOUR, Designing coalition-proof mechanisms - the case of electricity markets SEAN MEYN, Irrational Agents and the Power Grid		Energy
Salle LA4 Build L, Z 8 Basement 3x30 min	Air Transportation and Air Traffic Management , <i>Organizer</i> : Sonia Cafieri, session 315 AHMED KHASIBA, A two-stage stochastic model for scheduling aircraft arrivals under uncertainty FERNANDO DIAS, Aircraft conflict resolution and heading recovery with mixed-integer programming SONIA CAFIERI, MINLP for aircraft conflict avoidance via speed and heading angle deviations		Sciences
PITRES Build O, Z 8 Ground Floor 3x30 min	Progress in Conic and MIP Solvers , <i>Organizer</i> : Imre Polik, session 237 JEAN-HUBERT HOURS, Artelys Knitro 11.0, a new conic solver and other novelties ERLING ANDERSEN, MOSEK version 9 FRANZ WESSELMANN, Recent enhancements in MATLAB Optimization Toolbox solvers for LP and MILP		Algo
Salle 22 Build G, Z 6 2nd floor 3x30 min	Structure Detection in Integer Programming , <i>Organizer</i> : Taghi Khaniyev, session 272 TAGHI KHANIYEV, Automatic structure detection in mixed integer programs MICHAEL BASTUBBE, Modular Detection of Model Structure in Integer Programming JONAS WITT, A Computational Investigation on Generic Cutting Planes in Branch-Price-and-Cut		Algo

Room	Invited Talks - Wednesday 3:15 PM – 4:45 PM		
SIGNALS Build C, Z 2 2nd floor 3x30 min	Logistics , <i>Chair</i> : Frieder Smolny, session 388 KAJ HOLMBERG, Using OpenStreetMap data for route optimization: extraction and reduction GWÉNAÉL RAULT, Modeling the Periodic Vehicle Routing Problem in an industrial context FRIEDER SMOLNY, Multiscale optimization of logistics networks		INTERFACE

Room	Discrete Optimization & Integer Programming - Wednesday 5:00 PM – 6:30 PM		
Salle 43 Build C, Z 1 3rd floor 2x30 min	IP-Formulations , <i>Chair</i> : Temitayo Ajayi, session 516 WOLFGANG RIEDL, The quadratic assignment problem: a comparison of two linearizations TEMITAYO AJAYI, Assessing Parametrized Linear Programming Relaxations With Superadditive Duality		IPtheory
Salle 44 Build C, Z 1 3rd floor 3x30 min	Exact Approaches for Vehicle Routing and Variants , <i>Organizer</i> : Ricardo Fukasawa, session 288 RICARDO FUKASAWA, The Capacitated Vehicle Routing Problem with Stochastic Demands CLAUDIO CONTARDO, Efficient metaheuristic pricing in vehicle routing RAFAEL MARTINELLI, Exact Solution of a Class of Vehicle Scheduling Problems		IPpractice
DURKHEIM Build A, Z 1 3rd floor 3x30 min	MINLP (III) , <i>Organizer</i> : Daniel Bienstock, session 67 ALBERTO DEL PIA, Cardinality-constrained linear regression with sparse matrices GUANYI WANG, Computational evaluation of new dual bounding techniques for sparse PCA JEFF LINDEROTH, Cutting Planes for Linear Programs with Complementarity Constraints		MINLP
Salle 34 Build B, Z 3 1st floor 3x30 min	Robust Approaches for Challenging Uncertain Optimization Problems , <i>Organizer</i> : Frauke Liers, session 124 TIMO GERSING, A New Approach for Extending Cover Inequalities for the Robust Knapsack Polytope ANDREAS SCHMITT, An Interdiction Approach for the Design of High-Rise Water Supply Systems SEBASTIAN TSCHUPPIK, Robust optimization with selected scenarios		MINLP
Salle 35 Build B, Z 4 Intermediate 3x30 min	Advances in MINLP , <i>Organizer</i> : Laura Palagi, session 165 MARIANNA DE SANTIS, An Active Set Algorithm for Robust Combinatorial Optimization VERONICA PICCILLI, Membrane System Design Optimization EMILIANO TRAVERSI, Dantzig Wolfe Decomposition for Binary Quadratic Programming		MINLP
LEYTEIRE Build E, Z 1 3rd floor 3x30 min	Approximation Algorithms for Geometric Packing Problems , <i>Organizer</i> : Fabrizio Grandoni, session 28 FABRIZIO GRANDONI, Approximating Geometric Knapsack via L-Packings ANDREAS WIESE, Parameterized (1+eps)-approximation algorithms for packing problems KLAUS JANSEN, Closing the gap for pseudo-polynomial strip packing		APPROX
Salle 36 Build B, Z 4 Intermediate 3x30 min	Online Optimization , <i>Organizer</i> : Kevin Schewior, session 35 VICTOR VERDUGO, How large is your graph? ANDREAS TÖNNIS, Submodular Secretary Problems: Cardinality, Matching, and Linear Constraints KEVIN SCHEWIOR, Tight Competitive Analysis for Online TSP on the Line		APPROX
Salle 41 Build C, Z 1 3rd floor 4x20 min	Connectivity problems and Steiner trees , <i>Chair</i> : Andreas E Feldmann, session 421 MARCUS BRAZIL, Computing minimum 2-connected Steiner networks in the Euclidean plane YASUKO MATSUI, Enumerating All Spanning Subgraphs with Edge-Connectivity at Least k MARK TURNER, The variable-cost node-weighted Steiner tree problem in the Euclidean plane. ANDREAS FELDMANN, Parameterized Approximation Algorithms for Bidirected Steiner Network Problems		COMB
Salle 39 Build E, Z 1 3rd floor 4x20 min	Shortest paths and cutting stock , <i>Chair</i> : Arnaud Vandaele, session 426 PEDRO DE LAS CASAS, Cost Projection Methods for the Shortest Path Problem with Crossing Costs ADAM SCHENLE, Solving the Time-Dependent Shortest Path Problem using Super-Optimal Wind MIRIAM SCHLÖTER, Earliest Arrival Transshipments in Networks With Multiple Sinks ARNAUD VANDAELE, One-dimensional cutting stock instances for which few patterns are needed		COMB

Room	Optimization under Uncertainty - Wednesday 5:00 PM – 6:30 PM			
DENIGES Build C, Z 5 Ground Floor 3x30 min	Stochastic Programming and Distributionally Robust Optimization Models with Endogenous Uncertainty , <i>Organizer:</i> Miguel Lejeune, session 248 NILAY NOYAN, Distributionally Robust Optimization with Decision-Dependent Ambiguity Set KARTIKEY SHARMA, Optimization Under Decision-dependent Uncertainty MIGUEL LEJEUNE, Chance-Constrained Optimization Models with Endogenous and Exogenous Uncertainty			Stoch
Salle 32 Build B, Z 5 Ground Floor 4x20 min	Stochastic optimization models and applications , <i>Chair:</i> F.-Javier Heredia, session 495 GEOFFREY OXBERRY, Design optimization under uncertainty GISLAINE PERICARO, Optimal non-anticipative scenarios for nonlinear hydrothermal power systems ALEXANDER VINEL, A Generalized Risk Parity Model with Application for Hazmat Transportation F.-JAVIER HEREDIA, A multistage stochastic programming model for the optimal bid of a wind producer			Stoch
Salle 37 Build B, Z 4 Intermediate 2x30 min	Robust Adaptive Control and Learning , <i>Organizer:</i> Siqian Shen, session 97 SIQIAN SHEN, Distributionally Robust Adaptive Control under Nonstationary Uncertainty LAUREN STEIMLE, Leveraging stochastic programming to design robust policies for Markov decision			Robust
Salle 33 Build B, Z 5 Ground Floor 4x20 min	Robust combinatorial optimization III , <i>Organizer:</i> Moritz Mühlenenthaler, session 255 MORITZ MÜHLENTHALER, Robust Matching Augmentation VIKTOR BINDEWALD, Solving Bulk-Robust Assignment Problems to Optimality FELIX HOMMELSHHEIM, Assignment Problems with few Failure Resources JAEHYEON RYU, Distributionally Robust Chance-Constrained Binary Knapsack Problem			Robust
Salle 30 Build B, Z 5 Ground Floor 3x30 min	Aspects of Multiobjective Combinatorial Optimization , <i>Organizer:</i> Matthias Ehrgott, session 87 SERPIL SAYIN, Generating Representative Sets for Multiobjective Discrete Optimization Problems KIM ANDERSEN, A multi-objective approach to sensitivity analysis of MILP FRITZ BÖKLER, Approximating the Multi-objective Shortest Path Problem in Practice			Game

Room	Continuous Optimization - Wednesday 5:00 PM – 6:30 PM			
GINTRAC Build Q, Z 8 Ground Floor 3x30 min	Software for Nonlinear Optimization , <i>Organizer:</i> Sven Leyffer, session 133 CHARLIE VANARET, Argonot: An Open-Source Software Framework for Nonlinear Optimization PHILIP GILL, A Primal-Dual Shifted Barrier Method for Nonlinear Optimization ELIZABETH WONG, L-RH-B: Software for Large-Scale Bound-Constrained Optimization			NLP
Salle 05 Build Q, Z 11 1st floor 3x30 min	Conjugate Gradient Methods , <i>Chair:</i> Giovanni Fasano, session 362 MEHIDDIN AL-BAALI, A New Diagonalizable Conjugate Gradient Method for Unconstrained Optimization GIOVANNI FASANO, Conjugate Direction Methods and Polarity for Quadratic Hypersurfaces LUIS LUCAMPIO PEREZ, Non-linear conjugate gradient for vector optimization on Riemannian manifolds			NLP
Salle 9 Build N, Z 12 4th floor 3x30 min	Linear Optimization II , <i>Chair:</i> Julian Hall, session 416 JULIAN HALL, Starting the dual revised simplex method from an advanced basis MASAYA TANO, On the number of simplex iterations of the steepest-edge for a nondegenerate LP MARINA EPELMAN, New Results on the Simplex Method for Minimum Cost Flows in Infinite Networks			NLP
Salle ARNOZAN Build Q, Z 8 Ground Floor 3x30 min	Interior Point Methods in LP and NLP , <i>Chair:</i> Andre L Tits, session 430 ANDRE TITS, Constraint-Reduced MPC for CQP, with a Modified Active Set Identification Scheme THIANE COLIBORO, An IPM approach for a time dependent large-scale assortment allocation problem NGOC NGUYEN TRAN, Local analysis of a primal-dual method for NLP without constraint qualification			NLP
Salle 8 Build N, Z 12 4th floor 3x30 min	Methods and Analysis for Nonsmooth Optimization , <i>Organizer:</i> Michael L Overton, session 86 MICHAEL OVERTON, Partial Smoothness of the Numerical Radius ADRIAN LEWIS, Partial smoothness and active sets: a fresh approach DMITRIY DRUSVYATSKIY, Subgradient methods for sharp weakly convex problems			NonSmooth
Salle 20 Build G, Z 6 1st floor 3x30 min	Noncommutative polynomial optimization: semidefinite relaxations, free convexity and applications to quantum information I , <i>Organizer:</i> Monique Laurent, session 20 MARKUS SCHWEIGHOFER, Inclusion of spectrahedra, free spectrahedra and coin tossing TOM-LUKAS KRIEL, Matrix convex sets and matrix extreme points JANEZ POVH, Extracting optimisers by non-commutative GNS construction is robust			SDP
Salle LC5 Build L, Z 10 Intermediate 1 4x20 min	Completely Positive Cones and Applications , <i>Chair:</i> Patrick Groetzner, session 464 MUHAMMAD IQBAL, Approximation Hierarchies for Copositive and Completely Positive Tensor Cones MINA SAEED BOSTANABAD, Inner approximating the completely positive cone via the cone of SDD matrices ELLEN FUKUDA, Solving nonlinear conic programming problems with a new DC approach PATRICK GROETZNER, A method to compute factorizations for completely positive matrices			SDP
Salle 06 Build Q, Z 11 1st floor 3x30 min	Complementarity Problems , <i>Organizer:</i> Samir K. Neogy, session 173 MUDDAPPA GOWDA, Weakly homogeneous variational inequalities SAMIR NEOGY, On testing matrices with nonnegative principal minors DIPTI DUBEY, Total Dual Integrality and Integral Solutions of Linear Complementarity Problem			Variat
Salle KC6 Build K, Z 10 Intermediate 1 4x20 min	Non-Convex and Second-order Methods in Machine Learning , <i>Organizer:</i> Martin Takac, session 33 AURELIEN LUCCHI, Escaping Saddles with Stochastic Algorithms REZA BABANEZHAD, Convergence Rate of Expectation-Maximization FRANCESCO ORABONA, Parameter-free nonsmooth convex stochastic optimization through coin betting MARTIN TAKAC, SGD and Hogwild! Convergence Without the Bounded Gradients Assumption			RandomM
Salle 21 Build G, Z 6 Intermediate 3x30 min	Progress in methods and theory of derivative-free optimization , <i>Chair:</i> Serge Gratton, session 42 CHARLES AUDET, Mesh-based Nelder-Mead algorithm for inequality constrained optimization JEFFREY LARSON, Manifold Sampling for Nonconvex Optimization of Piecewise Linear Compositions MORTEZA KIMIAEI, Competitive derivative-free optimization with optimal complexity			DerFree
Salle AURIAC Build G, Z 6 1st floor 4x20 min	Advances in optimization methods for time dependent problems II , <i>Organizer:</i> Denis Ridzal, session 225 STEFAN ULBRICH, Preconditioners for unsteady PDE-constrained optimization and parallel variants SEBASTIAN GOETSCHEL, Parallel-in-time PDE-constrained optimization using PFASST ANDREAS POTSCHKA, Direct Multiple Shooting for parabolic PDE constrained optimization DENIS RIDZAL, Multigrid-in-time methods for optimization with nonlinear PDE/DAE constraints			Control

Room	Specific Models, Algorithms, and Software - Wednesday 5:00 PM – 6:30 PM			
FABRE Build J, Z 8 Ground Floor 3x30 min	Problems in the intersection of machine learning and optimization , <i>Chair</i> : Ross M Anderson, session 328 BRANDON AMOS, OptNet: End-to-End Differentiable Constrained Optimization ROSS ANDERSON, Solving argmax for a neural network with MIP, and related optimization problems VINOD NAIR, Learning Fast Optimizers for Contextual Stochastic Integer Programs			Learning
Salle 22 Build G, Z 6 2nd floor 2x20 min	Large-scale convex optimization , <i>Chair</i> : Alexander V. Rogozin, session 479 ALEXANDER ROGOZIN, Optimal distributed convex optimization on slowly time-varying graphs TOMMASO COLOMBO, Leverage data structure to improve Stochastic Gradient Descent algorithm			Learning
Salle 24 Build G, Z 6 3rd floor 4x20 min	Location and Routing , <i>Chair</i> : Mustapha Oudani, session 451 IMEN BEN MOHAMED, Stochastic Two-echelon Location-Routing RASUL ESMAILBEIGI, Benders decomposition for a hierarchical facility location problem NICOLAS KÄMMERLING, Benders Decomposition for Uncertain Hub Location with Variable Allocation MUSTAPHA OUDANI, The Incomplete Hub Location and Routing Problem			Logistics
Salle 16 Build I, Z 7 2nd floor 3x20 min	Production-Routing , <i>Chair</i> : Feng Gao, session 456 FENG GAO, Models and Algorithms for Robust Production Routing Under Demand Uncertainty SARANTHORN PHUSINGHA, Meta-Heuristics for Multi-Period Sales Districting Problem YUZHUO QIU, Models and Algorithms for Stochastic and Robust Production Routing with Time Win			Logistics
Salle 18 Build I, Z 7 1st floor 3x20 min	Machine Scheduling 2 , <i>Chair</i> : Guopeng Song, session 529 CRISTIANE FERREIRA, Human-Robot Scheduling in Collaborative Environments MARGAUX NATTAFF, Parallel machine scheduling with time constraints on machine qualifications GUOPENG SONG, The robust machine availability problem			Scheduling
Salle DENUCE Build Q, Z 8 Ground Floor 4x20 min	Optimization and modeling of integrated energy systems , <i>Organizer</i> : Jalal Kazempour, session 71 STEFANOS DELIKARAOGLOU, Market-based valuation of natural gas network flexibility IBRAHIM ABADA, Unintended consequences: The snowball effect of energy communities LESIA MITRIDATI, Coordination of Heat and Electricity Systems via Market-Based Mechanisms ANNA SCHWELE, Virtual bidders and self-schedulers in electricity and natural gas markets			Energy
Salle 23 Build G, Z 6 3rd floor 3x30 min	Energy Market Models , <i>Chair</i> : Sauleh A Siddiqui, session 522 THOMAS KLEINERT, Global Optimization of Multilevel Electricity Market Models EMRE CELEBI, Co-optimization Models with Market-Clearing Equilibrium: A Robust Approach SAULEH SIDDIQUI, Solving Problems with Equilibrium Constraints Applied to Energy Markets			Energy
Salle LA4 Build L, Z 8 Basement 3x30 min	Resource-constrained assignment and scheduling , <i>Organizer</i> : Fabian Bastin, session 398 GIORGIO SARTOR, A novel formulation for job-shop scheduling in traffic management VIPIN VIJAYALAKSHMI, Improving local search for distributed resource allocation and equilibrium. FABIAN BASTIN, A learning-based approach for multi-skill staffing optimization in call centers			Sciences
PITRES Build O, Z 8 Ground Floor 3x30 min	Progress in MIP Solvers II , <i>Organizer</i> : Hans Mittelmann, session 234 ANDREA TRAMONTANI, Benders Decomposition in IBM CPLEX MICHAEL WINKLER, Gurobi 8.0 - What's new MICHAEL PERREGAARD, Recent Progress in the Xpress Solvers			Algo

Room	Invited Talks - Wednesday 5:00 PM – 6:30 PM			
SIGALAS Build C, Z 2 2nd floor 4x20 min	Solvers and softwares , <i>Chair</i> : François Clautiaux, session 390 JULIEN DARLAY, Solving packing, routing and scheduling problems using Local-Solver PAWEŁ LICHOCKI, Applied mixed integer programming: The why and how ROBERT LUCE, Solving MIPs with Gurobi Instant Cloud JOHANNES MÜLLER, Creating an optimization web app with FICO Xpress			INTERFACE

Room	Discrete Optimization & Integer Programming - Thursday 8:30 AM – 10:30 AM			
Salle 34 Build B, Z 3 1st floor 4x30 min	Integer linear programming, convex geometry, and lattices , <i>Organizer:</i> Sinai Robins, session 142 ACHILL SCHÜRMANN, Exploiting Linear Symmetries in Integer Convex Optimization	MATTHIAS SCHYMURA, On the reverse isodiametric problem	KEVIN WOODS, The Complexity of Presburger Arithmetic in Fixed Dimension	IPtheory SINAI ROBINS, Fourier transforms of polytopes, solid angle sums, and discrete volumes
Salle 35 Build B, Z 4 Intermediate 4x30 min	Convexity and Polytopes , <i>Chair:</i> David Warme, session 518 EMILIANO LANCINI, Box-Total Dual Integrality and k-Edge-Connectivity	TAMON STEPHEN, On the Circuit Diameter Conjecture	FILIPPE CABRAL, The role of extreme points for convex hull operations.	IPtheory DAVID WARME, Metrics for Strength of Inequalities with Respect to a Polytope
Salle 44 Build C, Z 1 3rd floor 4x30 min	Advanced Linear(ized) MIP Formulations for Zero-One Programs , <i>Organizer:</i> Sven Mallach, session 127 LEON EIFLER, Mixed-Integer Programming for Clustering in Non-reversible Markov Processes	ADALAT JABRAYILOV, A new ILP for the Steiner Tree Problem with Revenues, Budget and Hop Constraints	DANIEL SCHMIDT, An extended formulation for the Steiner Forest Problem	IPpractice SVEN MALLACH, Compact Linearization for Zero-One Quadratic Programs
LEYTEIRE Build E, Z 1 3rd floor 4x30 min	Submodular Maximization , <i>Organizer:</i> Moran Feldman, session 29 MORAN FELDMAN, Deterministic and Combinatorial Algorithms for Submodular Maximization	BARUCH SCHEBER, Constrained Submodular Maximization via Greedy Local Search	SIMON BRUGGMANN, Submodular Maximization through the Lens of Linear Programming	APPROX NIV BUCHBINDER, Constrained Submodular Maximization via a Non-symmetric Technique
Salle 43 Build C, Z 1 3rd floor 4x30 min	Cycles and Trees , <i>Organizer:</i> Tobias Mömke, session 90 ALANTHA NEWMAN, Coloring and Dominating Set on Digraphs with Bounded Independence Number	ANTONIOS ANTONIADIS, A PTAS for TSP with Hyperplane Neighborhoods	LÁSZLÓ KOZMA, Maximum Scatter TSP in doubling metrics	APPROX RALF KLASING, Approximability of Hub Allocation Problems
Salle 36 Build B, Z 4 Intermediate 4x30 min	Bin Packing , <i>Chair:</i> Frits CR Spieksma, session 344 NADIA BRAUNER, Automatically computed bounds for the online bin stretching problem	LEAH EPSTEIN, Batched bin packing	SHLOMO KARHI, Online Packing of Arbitrary Size Items into Designated and Multipurpose Bins	APPROX FRITS SPIEKSMAN, Partitioning Vectors into Quadruples
Salle 41 Build C, Z 1 3rd floor 4x30 min	Graphs and clutters , <i>Organizer:</i> Gerard Cornuejols, session 263 GUOLI DING, Packing cycles in a tournament	SHARAT IBRAHIMPUR, Min-Max Theorems for Packing and Covering Odd (u,v)-trails	AHMAD ABDI, Cuboids, a class of clutters	COMB DABEEN LEE, Deltas, extended odd holes and their blockers
Salle 39 Build E, Z 1 3rd floor 4x30 min	Graph theory , <i>Chair:</i> Thomas Bellitto, session 422 ISABEL BECKENBACH, A Tight Cut Decomposition for Hypergraphs with Perfect Matchings	XUJIN CHEN, Densities, Matchings, and Fractional Edge-Colorings	YUTARO YAMAGUCHI, Making Bipartite Graphs DM-irreducible	COMB THOMAS BELLITTO, Optimal weighting to minimize the independence ratio of a graph
DURKHEIM Build A, Z 1 3rd floor 4x30 min	Parallel Computing and Sustainability , <i>Organizer:</i> Bistra Dilkina, session 296 FEI FANG, Designing the game to play in security and sustainability domains	NAHID JAFARI, A Robust Optimization Model for an Invasive Species Management Problem	SALVADOR ABREU, Parallel HYbridization for Simple Heuristics	CP CIARAN MCCREESH, Parallel Search, Ordering, Reproducibility, and Scalability
Salle 47 Build A, Z 1 3rd floor 4x30 min	Performance Analysis , <i>Organizer:</i> Charlotte Truchet, session 298 LARS KOTTHOFF, The Shapley Value and the Temporal Shapley Value for Algorithm Analysis	CHARLOTTE TRUCHET, Phase transitions in random constraint satisfaction problems	CHARLOTTE TRUCHET, A probabilistic study of the propagation of the AllDifferent constraint	CP ALEXANDER TESCH, Improving Energetic Propagations for Cumulative Scheduling

Room	Optimization under Uncertainty - Thursday 8:30 AM – 10:30 AM			
DENIGES Build C, Z 5 Ground Floor 4x30 min	New results in chance-constrained optimization , <i>Chair:</i> Bismark Singh, session 489 ABEBE GELETU, Smoothing Methods for Chance Constrained Optimization of Elliptic PDE Systems	RENÉ HENRION, Dynamic chance constraints under random distribution	ARMIN HOFFMANN, Differentiability of joint chance constraints under weakened LICQ	Stoch BISMARK SINGH, Approximating Chance Constrained Programs using Classical Inequalities
Salle 32 Build B, Z 5 Ground Floor 4x30 min	Topics in multistage and integer stochastic optimization , <i>Organizer:</i> Jim Luedtke, session 490 OZGE SAFAK, Three-Stage Stochastic Airline Scheduling Problem	MEHDI KARIMI-NASAB, State space analysis of a stochastic DP to deal with curse of dimensionality	CONG HAN LIM, Partitioned Subgradient Methods for Stochastic Mixed Integer Program duals	Stoch JIM LUEDTKE, Lagrangian dual decision rules for multistage stochastic integer programs
Salle 37 Build B, Z 4 Intermediate 4x30 min	K-adaptability , <i>Organizer:</i> Anirudh Subramanyam, session 1 JANNIS KURTZ, Min-max-min Robust Optimization for the Capacitated Vehicle Routing Problem	MICHAEL POSS, Min-Max-Min Robustness for Combinatorial Problems with Budgeted Uncertainty	JONAS PRUENTE, K-Adaptability in Stochastic Programming	Robust ANIRUDH SUBRAMANYAM, K-Adaptability in Two-Stage Mixed-Integer Robust Optimization
Salle 33 Build B, Z 5 Ground Floor 3x30 min	New applications of robust optimizations , <i>Chair:</i> Mirjam Duer, session 461 JORGE VERA, Condition and geometric measures for consistency in intertemporal optimization	ALEC KOPPEL, Compositional Stochastic Optimization with Kernels for Robust Online Learning	MIRIAM DUER, Robust Approach for Stratified Sampling Allocation Problems	Robust MIRIAM DUER, Robust Approach for Stratified Sampling Allocation Problems
Salle 30 Build B, Z 5 Ground Floor 4x30 min	Stackelberg Games , <i>Chair:</i> Stefano Coniglio, session 374 JEAN-BERNARD EYTARD, Tropical geometry applied to bilevel programming	STEFANO WALDHERR, Bilevel Programming for Combinatorial Exchanges with Budget Constraints	STEFANO CONIGLIO, Computing Pessimistic Leader-Follower Equilibria with Multiple Followers	Game FRANCESCO CARUSO, A learning approach for selection of subgame perfect Nash equilibria

Continuous Optimization - Thursday 8:30 AM – 10:30 AM				
Salle ARNOZAN Build Q, Z 8 Ground Floor 4x30 min	First-order methods: advances and applications , <i>Organizer:</i> Immanuel M. Bomze, session 3 AXEL BOEHM, Incremental mirror descent with random sweeping and a proximal step IMMANUEL BOMZE, Active-set identification in Frank-Wolfe variants on the standard simplex MICHAEL KAHR, Robust StQP, first-order methods, and applications in social network analysis MATHIAS STAUDIGL, On the convergence of projection free Hessian Barrier-Gradient Algorithms			
GINTRAC Build Q, Z 8 Ground Floor 4x30 min	Recent advances in interior point methods and NLP , <i>Organizer:</i> Michael Todd, session 77 MICHAEL TODD, The ellipsoid method redux E. ALPER YILDIRIM, MILP Formulations for Globally Solving Nonconvex Standard Quadratic Programs YINYU YE, A One-phase Interior Point Method For Nonconvex Optimization OLIVER HINDER, A polynomial time interior point method for problems with nonconvex constraints			
Salle 05 Build Q, Z 11 1st floor 4x30 min	Machine learning for optimisation , <i>Organizer:</i> Coralia Cartis, session 176 ADILET OTEMISSOV, Dimensionality reduction for global optimisation: adaptive random embeddings CORALIA CARTIS, Stochastic trust-region with global rate to second-order criticality RADU BALTEAN-LUGOJAN, Online generation via offline selection of strong linear cuts from QP SDP relax. BORIS HOUSKA, Global optimization in Hilbert Space			
Salle KC7 Build K, Z 10 Intermediate 2 4x30 min	First Order Methods I , <i>Chair:</i> Sandra A. Santos, session 436 SANDRA SANTOS, Accelerating block coordinate descent methods with identification strategies FRANCESCO LOCATELLO, On Matching Pursuit and Coordinate Descent TIANYI LIN, A Unified Scheme to Accelerate Adaptive Cubic Regularization and Gradient Method FELIX LIEDER, Performance Estimation for Fixed Point Iterations			
Salle LC4 Build L, Z 9 Intermediate 1 4x30 min	Universal methods in non-smooth analysis , <i>Organizer:</i> Alexander Gasnikov, session 53 ALEXANDER TYURIN, Universal Nesterov's gradient method in general model conception SERGEY GUMINOV, Dual universal conjugate gradient type methods. ALEXANDER TYTOV, Universal Proximal Method for Variational Inequalities DMITRY KAMZOLOV, Universal Intermediate Gradient Method for Convex Problems with Inexact Oracle			
Salle 8 Build N, Z 12 4th floor 4x30 min	First-order methods for nonconvex and pathological convex problems , <i>Organizer:</i> Wotao Yin, session 183 MILA NIKOLOVA, Alternating structure-adapted proximal gradient descent for non-convex problems WENBO GAO, ADMM for Multiaffine Constrained Optimization ERNEST RYU, Douglas-Rachford Splitting for Pathological Convex Optimization WOTAO YIN, Polynomial-Time Run-and-Inspect Method for Certain Nonconvex Optimization			
Salle 9 Build N, Z 12 4th floor 4x30 min	Non smooth optimization for large scale problems , <i>Organizer:</i> Yu Du, session 556 YU DU, Selective Linearization for Multi-block Statistical Learning Problems DMITRY GRISHCHENKO, Randomized Proximal Algorithm with Automatic Dimension Reduction. SHUMMIN NAKAYAMA, Inexact proximal memoryless spectral-scaling MBFGS MIN TAO, Decomposition methods for computing d-stationary solutions for nonconvex problem			
Salle 20 Build G, Z 6 1st floor 4x30 min	Computer-assisted analyses of optimization algorithms I , <i>Organizer:</i> Adrien Taylor, session 19 YOEL DRORI, Efficient First-order Methods for Convex Minimization: A Constructive Approach DONGHWAN KIM, Optimized first-order method for decreasing gradient of smooth convex functions BRYAN VAN SCOY, The Fastest Known First-Order Method for Smooth Strongly Convex Minimization LAURENT LESSARD, Analysis of First-Order Algorithms for Distributed Optimization			
Salle LC5 Build L, Z 10 Intermediate 1 4x30 min	Geometry and duality in convex optimization , <i>Organizer:</i> Javier F Pena, session 160 DAVID GUTMAN, Condition Numbers for Convex Functions with Polytope Domains JAVIER PENA, Conditioning of conic systems via the Grassmannian manifold JOURDAIN LAMPERSKI, Solving linear inequalities via non-convex optimization GABOR PATAKI, On positive duality gaps in semidefinite programming			
Salle 06 Build Q, Z 11 1st floor 4x30 min	Nonlinear Optimization and Variational Inequalities I , <i>Organizer:</i> Xin Liu, session 140 YAXIANG YUAN, Theory and Application of p-regularized subproblem with $p > 2$ JINYAN FAN, A semidefinite relaxation algorithm for polynomial equations CONG SUN, On a special robust optimization problem LIANG ZHAO, Limited memory algorithms with cubic regularization			
Salle KC6 Build K, Z 10 Intermediate 1 4x30 min	Recent Advances on Stochastic Algorithms and Machine Learning , <i>Organizer:</i> Shiqian Ma, session 202 QIHANG LIN, Level-Set Methods for Finite-Sum Constrained Convex Optimization XUDONG LI, Estimation of Markov Chain via Rank-constrained Likelihood GUANGHUI LAN, Random gradient extrapolation for distributed and stochastic optimization RENBO ZHAO, An Accelerated Algorithm for Stochastic Three-composite Optimization			
Salle 21 Build G, Z 6 Intermediate 4x30 min	Bayesian and Randomized Optimization I , <i>Chair:</i> Stefan M Wild, session 39 MICKAEL BINOIS, Improving Bayesian optimization via random embeddings SAUL TOSCANO-PALMERIN, Bayesian Optimization of Expensive Integrands CLÉMENT ROYER, Using Models in Allocation and Partition Algorithms YOUSSEF DIOUANE, A Rigorous Framework for Efficient Global Optimization			
Salle AURIAC Build G, Z 6 1st floor 4x30 min	Optimal Control of Variational Inequalities and Complementarity Systems , <i>Chair:</i> Alexandre Vieira, session 336 ALEXANDRE VIEIRA, Optimal control of Linear Complementarity Systems ANNE-THERESE RAULS, Computing a Sub-gradient for the Solution Operator of the Obstacle Problem AILYN STÖTZNER, Optimal Control of Thermoelastoplasticity ANNA WALTER, Optimal Control of Elastoplasticity Problems with Finite Deformations			

Room	Specific Models, Algorithms, and Software - Thursday 8:30 AM – 10:30 AM			
FABRE Build J, Z 8 Ground Floor 4x30 min	First-order methods for large-scale convex problems , <i>Organizer:</i> Stephen A Vavasis, session 316 STEPHEN VAVASIS, A single potential governing convergence of CG, AG and Geometric Descent MERT GURBUZBALABAN, Robust Accelerated Gradient Method PETER RICHTARIK, Randomized methods for convex feasibility problems and applications to ML YAO LIANG YU, Bregman Divergence for Stochastic Variance Reduction <div>Learning</div>			
Salle DENUCE Build Q, Z 8 Ground Floor 4x30 min	Large-scale learning , <i>Organizer:</i> Lorenzo Rosasco, session 335 MIKHAIL BELKIN, The power of interpolation: on the effectiveness of SGD in modern learning CHRIS RE, Precision on the Brain: Low-Precision to High-Precision for Machine Learning GERGELY NEU, Iterate averaging as regularization for stochastic gradient descent LORENZO ROSASCO, Convergence vs stability: a regularization view on accelerated methods <div>Learning</div>			
Salle 16 Build I, Z 7 2nd floor 4x30 min	Dynamical systems, control and optimization , <i>Chair:</i> Benjamin Recht, session 470 FREDRIK BAGGE CARLSON, Tangent Space Regularization for Neural-Networks Models of Dynamical Systems BENJAMIN RECHT, The sample complexity of iteratively learning to control NIKOLAI MATNI, Optimization-based adaptive control using a system level approach. ASHIA WILSON, Lyapunov arguments in optimization <div>Learning</div>			
Salle LA4 Build L, Z 8 Basement 4x30 min	Multi-commodity flows , <i>Organizer:</i> Ralf Borndörfer, session 358 DANIEL GRANOT, Monotonicity and conformality in multicommodity network-flow problems EDUARDO MORENO, An exact method based on adaptive partitions for the Stochastic Fixed-Charge MCF STEFANO GUALANDI, Approximate Wasserstein Distances of order 1 between images RALF BORNDÖRFER, Metric Inequalities for Routings on Direct Connections in Line Planning <div>Network</div>			
PITRES Build O, Z 8 Ground Floor 3x30 min	Vehicle Routing I , <i>Chair:</i> Guy Desaulniers, session 411 GUY DESAULNIERS, The vehicle routing problem with stochastic and correlated travel times BOLOR JARGALSAIKHAN, An exact formulation for pickup and delivery problem with divisible split-ups MATHIAS KLAPP, Branch-and-Price for Probabilistic Vehicle Routing <div>Logistics</div>			
Salle 23 Build G, Z 6 3rd floor 4x30 min	Unit Commitment Problem and Applications , <i>Organizer:</i> Tiziano Parriani, session 94 ALLEGRA DE FILIPPO, Off-line/on-line optimization under uncertainty on energy management DIMITRI THOMOPULOS, A Constrained Shortest Path formulation for the Hydro Unit Commitment Problem RAFAEL LOBATO, Stochastic Hydrothermal Unit Commitment via Multi-level Scenario Trees TIZIANO PARRIANI, CHP Systems Optimization in Presence of Time Binding Constraints <div>Energy</div>			
Salle 24 Build G, Z 6 3rd floor 4x30 min	Mining Applications , <i>Organizer:</i> Alexandra M Newman, session 172 MARCOS GOYCOOLEA, Lane's Algorithm Revisited PETER MALKIN, A MILP-based approach for loader assignment in open pit scheduling LEVENTE SIPEKI, Optimal Selection of Support Pillars in an Underground Mine ALEXANDRA NEWMAN, Mathematical Methods for Complex Underground Design and Scheduling Problems <div>Energy</div>			
Salle 22 Build G, Z 6 2nd floor 4x30 min	Numerically Efficient Methods for Piecewise Algorithmic Differentiation II , <i>Organizer:</i> Torsten F Bosse, session 270 LAURENT HASCOET, Pushing the Algorithmic Differentiation tool Tapenade towards new languages PETER STECHLINSKI, Generalized Sensitivity Analysis of Nonlinear Programs KAMIL KHAN, Evaluating generalized derivatives efficiently for nonsmooth composite functions LISA HEGERHORST, Optimality Conditions for Nonsmooth Constrained Optimization Problems <div>Algo</div>			
Salle 18 Build I, Z 7 1st floor 3x30 min	High-Performance Computing in Optimization I , <i>Organizer:</i> Kibaek Kim, session 271 TED RALPHS, Performance Assessment for Parallel MILP Solvers YUJI SHINANO, Ubiquity Generator Framework to parallelize state-of-the-art B and B based solvers KIBAEEK KIM, Branching Strategies on Decomposition Methods for Mixed-Integer Programming <div>Algo</div>			

Room	Invited Talks - Thursday 8:30 AM – 10:30 AM			
SIGALAS Build C, Z 2 2nd floor 4x30 min	Energy , <i>Chair:</i> Kazem Abbaszadeh, session 387 RISHI ADIGA, Optimization Models for Geothermal Energy RODOLPHE GRISET, Static robustness for EDF nuclear long term production planning GABRIELA MASCHIETTO, Optimization of district heating production operations MAHBUBEH HABIBIAN, Demand and reserve co-optimization for a price-making consumer of electricity <div>INTERFACE</div>			

Room	Invited Talks - Thursday 11:00 AM – 12:00 AM			
Auditorium Build Symph H, Z 0 Gambetta 1x60 min	The BARON software for MINLP , <i>Organizer:</i> Claudia D Ambrosio, session 547 NIKOLAOS SAHINIDIS, The BARON software for MINLP <div>SEMI</div>			
BROCA Build W, Z 0 3rd floor 1x60 min	Cutting Planes in the Extended Space , <i>Organizer:</i> Adam N Letchford, session 543 OKTAY GUNLUK, Cutting Planes in the Extended Space <div>KEYNOTE</div>			
DENIGES Build C, Z 5 Ground Floor 1x60 min	Effective Scenarios and Scenario Reduction for Risk-Averse Stochastic Programs , <i>Organizer:</i> Jim Luedtke, session 544 TITO HOMEM-DE-MELLO, Effective Scenarios and Scenario Reduction for Risk-Averse Stochastic Programs <div>KEYNOTE</div>			

Room	Invited Talks - Thursday 1:30 PM – 2:30 PM			
Auditorium Build Symph H, Z 0 Gambetta 1x60 min	Randomness, risk and electricity prices , <i>Organizer:</i> Michael C Ferris, session 554 ANDY PHILPOTT, Randomness, risk and electricity prices <div>PLENARY</div>			

Room	Discrete Optimization & Integer Programming - Thursday 3:15 PM – 4:45 PM			
Salle 42 Build C, Z 1 3rd floor 3x30 min	Non-Standard IP Methods, Chair: Ulf Friedrich, session 513 TRI-DUNG NGUYEN, Algebraic Geometry and Integer Programings in Cooperative Game Theory	WOLFGANG KELLER, A hierarchy of cutting plane operators based on lineality spaces	ULF FRIEDRICH, A power series algorithm for non-negative IP	IPtheory
Salle 43 Build C, Z 1 3rd floor 3x30 min	Polynomial Time Solvable Problems and Complete Descriptions, Chair: A-E FALQ, Extreme points for scheduling around a common due date	LARS ROHWEDDER, On Integer Programming and Convolution	ANDREAS BÄRMANN, session 520 ANDREAS BÄRMANN, The Clique Problem with Multiple-Choice Constraints and Two Polynomial Subcases	IPtheory
Salle 44 Build C, Z 1 3rd floor 3x30 min	Computational Issues in Integer Programming, Organizer: Ricardo Fukasawa, session 289 LAURENT POIRRIER, Implementation and performance of the simplex method	GIULIA ZARPELLON, Learning MILP resolution outcomes before reaching time-limit	ALEKSANDR KAZACHKOV, Computational Results with V-Polyhedral Cuts and Strengthening Approaches	IPpractice
Salle 39 Build E, Z 1 3rd floor 3x30 min	Convexification and more (I), Organizer: Jon Lee, session 62 MARCIA FAMPA, Treating indefinite quadratic and bilinear forms in MINLP	AMÉLIE LAMBERT, Valid inequalities for QCQPs	LUZE XU, More Virtuous Smoothing	MINLP
Salle 34 Build B, Z 3 1st floor 3x30 min	Heuristics in MINLP, Chair: Bertrand Travacca, session 276 JOÃO LAURO FACO', MINLP solutions using a Generalized-GRASP solver	CHRISTOPH NEUMANN, Feasible rounding ideas for mixed-integer optimization problems	BERTRAND TRAVACCA, Dual Hopfield Models for Large Scale Mixed Integer Programming	MINLP
Salle 35 Build B, Z 4 Intermediate 3x30 min	MINLP with quadratic terms, Chair: Enrico Bettiol, session 282 FABRICIO OLIVEIRA, The p -Lagrangian method for MIQCQPs	ETIENNE LECLERCQ, A dedicated version of BiqCrunch for solving the Max-Stable Set problem exactly	ENRICO BETTIOL, Simplicial Decomposition for quadratic convex 0-1 problems	MINLP
LEYTEIRE Build E, Z 1 3rd floor 3x30 min	Approximation Algorithms for Clustering., Organizer: Deeparnab Chakrabarty, session 32 JAROSLAW BYRKA, Constant-Factor Approximation for Ordered k-Median	AMIT JAYANT DESHPANDE, Sampling-based algorithms and clustering with outliers	DEEPARNAB CHAKRABARTY, Generalized Center Problems with Outliers	APPROX
Salle 36 Build B, Z 4 Intermediate 3x30 min	Routing and Inventory, Organizer: Dorit Hochbaum, session 343 ALEXANDER BIRX, Improved upper bound for online Dial-a-Ride on the line	JAN MARCINKOWSKI, A 4/5 - Approximation Algorithm for the Maximum Traveling Salesman Problem	DORIT HOCHBAUM, The gap between the continuous and discrete Replenishment Schedule problem	APPROX
SIGALAS Build C, Z 2 2nd floor 3x30 min	Algorithms for TSP, Organizer: Ola Svensson, session 239 VERA TRAUB, Approaching 3/2 for the s-t path TSP	RAMAMOORTHY RAVI, Cut-Covering Decompositions for Connectivity Problems	OLA SVENSSON, A Constant-factor Approximation Algorithm for the Asymmetric Traveling Salesman	COMB
DURKHEIM Build A, Z 1 3rd floor 3x30 min	Applications of CP, Organizer: Louis-Martin Rousseau, session 284 OLIVIER BACHOLLET, A Constraint Programming approach to a meal delivery problem	FLORIAN GRENOUILLEAU, A Decomposition Approach for the Home Health Care Routing and Scheduling Problem	LOUIS-MARTIN ROUSSEAU, A CP Approach to the Traveling Salesman Problem in the Postal Services	CP

Room	Optimization under Uncertainty - Thursday 3:15 PM – 4:45 PM			
Salle 32 Build B, Z 5 Ground Floor 3x30 min	Theoretical and practical aspects of decomposition algorithms for multistage stochastic problems: 1, Organizer: Vincent Leclère, session 246 DAVID WOZABAL, Computing parameter sensitivities for discrete time Markov decision processes	NILS LÖHNDORF, Modeling time-dependent randomness in stochastic dual dynamic programming	BENOÎT LEGAT, Computing ellipsoidal controlled invariant sets for stochastic programming	Stoch
DENIGES Build C, Z 5 Ground Floor 3x30 min	Distributionally Robust Optimization With Marginals and Cones, Organizer: Divya Padmanabhan, session 354 LOUIS CHEN, Distributionally Robust Linear and Discrete Optimization with Marginals	GUANGLIN XU, A Copositive Approach for Decision Rule Approximations of Multi-Stage RO	DIVYA PADMANABHAN, Tractable Solutions to Distributionally Robust Optimisation	Robust
Salle 37 Build B, Z 4 Intermediate 3x30 min	Non-linear robust optimization, Chair: Laurent Alfandari, session 460 DANIEL DE ROUX, Graph learning with the Wasserstein metric	LAURENT ALFANDARI, Robust optimization for non-linear impact of data variation	SUH-WEN CHIOU, A mathematical program for signal control with equilibrium constraints	Robust
Salle 30 Build B, Z 5 Ground Floor 3x30 min	Generation and Representation Algorithms in Multiobjective Optimization, Organizer: Michael Stiglmayr, session 267 BRITTA SCHULZE, On a Polynomial Bound in Multiobjective Unconstrained Combinatorial Optimization	KATHRIN KLAMROTH, Efficient Representation of the Search Region and Generic Algorithms in MOCO	MICHAEL STIGLMAYR, Representation of the non-dominated set of multiobjective optimization problems	Game

Room	Continuous Optimization - Thursday 3:15 PM – 4:45 PM		
Salle 05 Build Q, Z 11 1st floor 3x30 min	Methods of Optimization in Riemannian Manifolds , <i>Organizer:</i> Orizon P. Ferreira, session 21 PAULO OLIVEIRA, A two-phase proximal-like algorithm in domains of positivity	GLAYDSTON BENTO, Proximal point method in multiobjective optimization on Hadamard manifolds	NLP
Salle 8 Build N, Z 12 4th floor 3x30 min	Extending the Reach of First-Order Methods, Part II , <i>Organizer:</i> Robert M. Freund, session 286 MATUS TELGARSKY, Risk and parameter convergence of logistic regression	ALP YURTSEVER, A conditional gradient framework for composite convex minimization	NonSmooth
Salle LC5 Build L, Z 10 Intermediate 1 3x30 min	Noncommutative polynomial optimization: semidefinite relaxations, free convexity and applications to quantum information II , <i>Organizer:</i> Monique Laurent, session 18 SANDER GRIBLING, Quantifying entanglement of a quantum correlation using polynomial optimization	ANTONIO VARVITSOTIS, Graph isomorphism: conic relaxations and physical interpretation	SDP
Salle 06 Build Q, Z 11 1st floor 3x30 min	Nonlinear Optimization and Variational Inequalities II , <i>Organizer:</i> Cong Sun, session 141 XIN LIU, On the Łojasiewicz Exponent of Quadratic Minimization with Sphere Constraint	BIN GAO, A Parallelizable Algorithm for Orthogonally Constrained Optimization Problems	Variat
Salle KC6 Build K, Z 10 Intermediate 1 3x30 min	Asynchronous Parallel and Distributed Optimization , <i>Organizer:</i> Wotao Yin, session 200 RÉMI LEBLOND, Improved asynchronous parallel optimization analysis for incremental methods	ROBERT HANNAH, Why Asynchronous Algorithms may Drastically Outperform Traditional Ones	RandomM
Salle AURIAC Build G, Z 6 1st floor 2x30 min	Theory and Methods for ODE- and PDE-Constrained Optimization 2 , <i>Chair:</i> Johann Schmitt, session 333 JOHANN SCHMITT, Optimal boundary control of hyperbolic balance laws with state constraints	PALOMA SCHÄFER AGUILAR, Numerical approximation of optimal control problems for conservation laws	Control

Room	Specific Models, Algorithms, and Software - Thursday 3:15 PM – 4:45 PM		
FABRE Build J, Z 8 Ground Floor 3x30 min	Accelerating Learning , <i>Organizer:</i> Martin Takac, session 322 DAMIEN SCIEUR, Nonlinear Acceleration of Stochastic Algorithms	SAI PRANEETH KARIMIREDDY, Accelerated First Order Methods with Approximate Subproblems	Learning
Salle 16 Build I, Z 7 2nd floor 3x30 min	Robust first order methods , <i>Organizer:</i> Fatma Kilinc-Karzan, session 332 DIMITRIS PAPALIOPOULOS, Robust distributed learning in the face of adversity	SURIYA GUNASEKAR, Characterizing implicit bias of optimization and its role in generalization	Learning
PITRES Build O, Z 8 Ground Floor 2x30 min	Path Problems , <i>Chair:</i> Yanchao Liu, session 453 EDWARD HE, Dynamic Discretization Discovery Algorithms for Time-Dependent Path Problems	YANCHAO LIU, Drone Path Planning and Aerial Traffic Flow	Logistics
Salle 18 Build I, Z 7 1st floor 3x30 min	Production Planning , <i>Chair:</i> Michel Siemon, session 531 TOBIAS HOFMANN, ISO-PESP - A PESP Variant for Minimizing the Cycle Time of Production Lines	JULIA LANGE, A matheuristic for the blocking job shop problem with a tardiness objective	Scheduling
Salle DENUCE Build Q, Z 8 Ground Floor 3x30 min	Optimization Models for Renewable Energy Integration 1 , <i>Organizer:</i> Luis F Zuluaga, session 120 PANAGIOTIS ANDRIANESIS, Optimal Grid Operation and DER Dispatch in Active Distribution Networks	GALINA ORLINSKAYA, Bilevel Optimization for Flexible Electricity Supply Tariff Design	Energy
Salle 23 Build G, Z 6 3rd floor 3x30 min	Progress in Algorithms for Optimal Power Flow Problems II , <i>Chair:</i> Miguel F Anjos, session 509 ALVARO LORCA, Robust Optimization for the Alternating Current Optimal Power Flow Problem	KSENIA BESTUZHEVA, Global Optimization for Alternating Current Optimal Power Flow	Energy
Salle 24 Build G, Z 6 3rd floor 3x30 min	Electricity Generation Scheduling and Dispatch , <i>Chair:</i> Christophe Duhamel, session 511 BESTE BASCIFTCI, Data-Driven Generator Maintenance and Operations Scheduling under Uncertainty	DIEGO JIMENEZ, A Network Flow-Based MILP Formulation for the Thermal Unit Commitment Problem	Energy
Salle LA4 Build L, Z 8 Basement 3x30 min	Inverse Problems in Physics , <i>Chair:</i> Leo Liberti, session 391 ANDREAS ALPERS, On the reconstruction of lattices from diffraction data	FABIAN KLEMM, Grain map reconstruction by means of generalized Voronoi Diagrams	Sciences
Salle 22 Build G, Z 6 2nd floor 3x30 min	High-Performance Computing in Optimization II , <i>Chair:</i> Joaquim Dias Garcia, session 466 TIMOTEJ HRGA, High-Performance Solver for Binary Quadratic Problems	BRIAN DANDURAND, Bilevel optimization approaches for power system security	Algo

Room	Discrete Optimization & Integer Programming - Thursday 5:00 PM – 6:30 PM			
Salle 43 Build C, Z 1 3rd floor 4x20 min	Advances in Integer Programming. <i>Organizer:</i> Robert Hildebrand, session 227 LAURA SANTÀ, On the diameter of the fractional matching polytope	GONZALO MUÑOZ, Treewidth-based Extension Complexity Lower Bounds	IGOR MALINOVIC, On valid inequalities for knapsack polytopes	ROBERT HILDEBRAND, Polynomial Integer Programming in Fixed Dimension and Applications in FPT IPtheory
Salle 42 Build C, Z 1 3rd floor 3x30 min	Cutting Planes for Special Problems. <i>Chair:</i> Eleazar Madriz, session 517 RUSLAN SIMANCHEV, Separation problem for 2-partition inequalities	MARKÓ HORVÁTH, Polyhedral results for position based scheduling of chains on a single machine	ELEAZAR MADRIZ, A Benders procedure for the b-complementary multisemigroup dual program.	IPtheory
Salle 36 Build B, Z 4 Intermediate 4x20 min	Matching Problems. <i>Organizer:</i> Sergio García Quiles, session 175 THANH NGUYEN, Stable Matching with Proportionality Constraints	MAXENCE DELORME, Mathematical models for stable marriage problems with ties	WILLIAM PETERSSON, Improvements in Kidney Exchange Programme Models for Large-Scale Programmes	PETER BIRO, Stable project allocation under distributional constraints IPpractice
Salle 44 Build C, Z 1 3rd floor 4x20 min	Cutting Planes. <i>Chair:</i> Fabrizio Marinelli, session 485 EDVIN ABLAD, A tighter ILP model and an improved branching for a load-balancing problem	SÁVIO DIAS, A Branch-and-Cut Approach for the Car Renter Salesman Problem	GEORGIA SOULI, On Lifted Cover Inequalities: A New Lifting Procedure with Unusual Properties	FABRIZIO MARINELLI, Exploiting star inequalities for the maximum quasi-clique problem IPpractice
DURKHEIM Build A, Z 1 3rd floor 3x30 min	Convexification and more (II). <i>Organizer:</i> Akshay Gupte, session 106 CHRISTOPH BUCHHEIM, Binary Programming with Semilinear Elliptic PDE-constraints	CHRISTOPHER COEY, Using algebraic structure to accelerate polyhedral approximation	ANDRES GOMEZ, Quadratic optimization with M-matrices and semi-continuous variables	MINLP
Salle 34 Build B, Z 3 1st floor 3x30 min	Relaxations in MINLP. <i>Chair:</i> Jan Ralf Lenz, Tight Convex Relaxations for Expansion Planning of Potential Driven Networks	KRONQVIST, session 280 JAN KRONQVIST, Using Regularization and Second Order Derivatives with Outer Approximation	ANDREAS LUNDELL, The Supporting Hyperplane Optimization Toolkit for Convex MINLP	MINLP
Salle 35 Build B, Z 4 Intermediate 3x30 min	Applications in MINLP. <i>Chair:</i> Justo Do Duc Le, Modeling and optimization of traffic at traffic-light controlled intersections	JUSTO PUERTO, session 283 MAXIMILIAN MERKERT, Flow-based extended formulations for feasible traffic light controls	JUSTO PUERTO, MINLP for pricing transaction costs in different models of portfolio selection	MINLP
LEYTEIRE Build E, Z 1 3rd floor 3x30 min	Approximation Algorithms for Optimization under Uncertainty. <i>Organizer:</i> Marc Uetz, session 95 THOMAS KESSELHEIM, Prophet Inequalities Made Easy: Stochastic Opt. by Pricing Non-Stochastic Inputs	MAX KLIMM, Hiring Secretaries over Time: The Benefit of Concurrent Employment	MARC UETZ, Greed is Good - Online Algorithms for Stochastic Unrelated Machine Scheduling	APPROX
Salle 41 Build C, Z 1 3rd floor 3x30 min	Approximation algorithms for combinatorial optimization problems. <i>Organizer:</i> Thomas Rothvoss, session 265 MOHIT SINGH, Approximation Algorithms for Diverse Subset Selection Problems	ROY SCHWARTZ, Local Guarantees in Graph Cuts and Clustering	ANUPAM GUPTA, Scheduling Stochastic Jobs on Unrelated Machines	COMB
Salle 39 Build E, Z 1 3rd floor 4x20 min	Heuristics for combinatorial optimization problems. <i>Chair:</i> Evren Guney, session 428 CID DE SOUZA, A Matheuristic to the Fire-fighter Problem on Graphs	SHINSAKU SAKAUE, Accelerated Best-first Search for Monotone Submodular Function Maximization	KAZUYA FUKUOKA, A statistical stopping criterion for simulated annealing	EVREN GUNEY, A Lagrangean Relaxation Based Heuristic For Efficient Influence Maximization COMB

Room	Optimization under Uncertainty - Thursday 5:00 PM – 6:30 PM			
Salle 32 Build B, Z 5 Ground Floor 4x20 min	Theoreticals and practicals aspects of decomposition algorithms for multistage stochastic problems: 2. <i>Organizer:</i> Vincent Leclère, session 247 OSCAR DOWSON, The practitioners guide to SDDP: lessons from SDDP.jl	FRANÇOIS PACAUD, Decomposing Dynamic Programming equations: from global to nodal value functions	VITOR DE MATOS, Energy portfolio optimization for Brazilian distribution companies: a multistage	LUIZ CARLOS DA COSTA JUNIOR, Stochastic programming framework for risk aversion representation with SDDP Stoch
Salle 30 Build B, Z 5 Ground Floor 3x20 min	Topics in multistage stochastic optimization. <i>Chair:</i> Felipe Beltrán, session 492 MIN ZHANG, Risk Minimization, Regret Minimization and the Progressive Hedging Algorithm	DAVID HEMMI, Recursive Evaluate and Cut for combinatorial Multistage Programs	FELIPE BELTRÁN, Stochastic dual dynamic programming with Chebyshev centers	Stoch
DENIGES Build C, Z 5 Ground Floor 3x30 min	Robust Optimization under Data Uncertainty. <i>Organizer:</i> Omid Nohadani, session 98 MATTHIAS EHROGOTT, Uncertain Data Envelopment Analysis	SOROOSH SHAFIEEZADEH, Wasserstein Distributionally Robust Kalman Filtering	ZHENZHEN YAN, Appointment Scheduling Under Time-Dependent Patient No-Show Behavior	Robust
Salle 37 Build B, Z 4 Intermediate 4x20 min	Combinatorial robust optimization I. <i>Organizer:</i> Marc Goerigk, session 167 ARTUR PESSOA, Solving the Robust Capacitated Vehicle Routing Problem Under Demand Uncertainty	MARC GOERIGK, Approximating combinatorial optimization problems with the OWA criterion	OYKU NAZ ATTILA, Reformulations for Robust Lot-Sizing Problem with Remanufacturing	CHRISTOPH HANSKNECHT, ast robust shortest path computations Robust
Salle 31 Build B, Z 5 Ground Floor 3x30 min	Approximation in dynamic programming. <i>Chair:</i> Philip C Placek, session 382 WOLF KOHN, Dynamic Programming via a State Abstract Machine and Implementation	PHILIP PLACEK, An Incremental Probability Model for Dynamic Systems	BENOÎT TRAN, A Stochastic Min-plus Algorithm for Deterministic Optimal Control	Markov

Room	Continuous Optimization - Thursday 5:00 PM – 6:30 PM			
Salle 05 Build Q, Z 11 1st floor 4x20 min	Polynomial and tensor optimization II, Organizer: Jiawang Nie, session 6 DIDIER HENRION, Computing invariant measures with the Lasserre hierarchy	Anwa Zhou, Completely positive tensor recovery with minimal nuclear value	João Gouveia, Phaseless rank of a matrix	XINZHEN ZHANG, A Complete Semidefinite Algorithm for Detecting Copositive Matrices and Tensors NLP
Salle KC7 Build K, Z 10 Intermediate 2 3x20 min	First Order Methods II, Chair: Guillaume Berger, session 437 GUILLAUME BERGER, Hölder-continuous gradient and first-order approximation accuracy	ANDERSEN ANG, Accelerating Nonnegative Matrix Factorization Algorithms using Extrapolation	LEI ZHAO, First-Order Primal-Dual Method for Nonlinear Convex Cone Programs	NLP
Salle 20 Build G, Z 6 1st floor 4x20 min	Global Optimization 3, Chair: Jean-Baptiste Hiriart-Urruty, session 503 JAROMIL NAJMAN, Tighter McCormick relaxations through subgradient propagation in a BaB framework	SIMON BOULMIER, Nonlinear branch-and-bound improvements for global optimization	MESTER ABIGÉL, JAVA implementation of a modular, population based global optimizer package	Global MINLP solver using interval unions
Salle LC4 Build L, Z 9 Intermediate 1 3x30 min	Efficient Semismooth Newton Methods for Large Scale Statistical Optimization Problems, Organizer: Defeng Sun, session 123 MEIXIA LIN, Efficient sparse Hessian based algorithms for the clustered lasso problem	YANGJING ZHANG, An efficient algorithm for solving large scale sparse group Lasso problems	DEFENG SUN, On the efficient computation of the projector over the Birkhoff polytope	NonSmooth
Salle 8 Build N, Z 12 4th floor 3x30 min	Different faces of nonsmoothness in optimization, Organizer: Tim Hoheisel, session 212 OLIVER STEIN, Global optimization of GSIPs using disjunctive programming	ABRAHAM ENGLE, Superlinear Convergence of QN Methods for PLQ Convex-Composite Optimization	TIM HOHEISEL, Applications of the generalized matrix-fractional function	NonSmooth
Salle AURIAC Build G, Z 6 1st floor 4x20 min	Recent Advances in Conic Programming III, Organizer: Masakazu Muramatsu, session 84 MAKOTO YAMASHITA, A path-following method for semidefinite programming without Slater condition	TANG PEIPEI, A Majorized Newton-CG ALM for Linearly Constrained Convex Programming	YOSHIO EBIHARA, Analysis of Positive Systems by Semidefinite and Copositive Programming	YUZHU WANG, Acceleration of the Lagrangian-DNN method for a class of QOPs SDP
Salle LC5 Build L, Z 10 Intermediate 1 4x20 min	Using coning programming in problems solving, Chair: Kurt Majewski, session 497 VILMAR JEFTE DE SOUSA, Linear Relaxation of Maximum k-Cut with Semidefinite-Based Constraints	ANJA KUTTICH, Feedback Controller and Topology Design for uncertain mechanical systems	JULIE SLIWAK, Stabilization of the moment-based approach to prove global optimality for ACOPF	KURT MAJEWSKI, Maximum Volume Inscribed Ellipsoids for Specific Absorption Rate Bounds in MRI SDP
Salle 06 Build Q, Z 11 1st floor 3x30 min	VU-decomposition techniques for nonsmooth optimization, Organizer: Claudia Sagastizabal, session 158 SHUAI LIU, An epsilon-VU algorithm with superlinear convergence	CLAUDIA SAGASTIZABAL, A derivative-free VU-algorithm for convex finite-max problems	LUCAS SIMÕES, A Fast Gradient Sampling-like Method for Solving Nonsmooth Optimization Problems	Variat
Salle ARNOZAN Build Q, Z 8 Ground Floor 4x20 min	Variational Analysis 5, Organizer: David Sossa, session 371 FRANCISCO JARA-MORONI, A global-local approach for stochastic programs with complementarity constraints	MIGUEL SAMA, Conical Regularization of Multiobjective Optimization Problems	DAVID SOSSA, Complementarity problems with respect to Loewnerian cones	CHEE KHIAN SIM, Relaxed Peaceman-Rachford Splitting Method: Convergence Study Variat
Salle KC6 Build K, Z 10 Intermediate 1 3x20 min	Recent Progress on Second-order Type Optimization Methods, Organizer: Andre Milzarek, session 302 CHING-PEI LEE, Inexact Successive Quadratic Approximation for Regularized Optimization	JIANG HU, Structured Quasi-Newton method For Optimization with Orthogonality Constraints	ANDRE MILZAREK, A stochastic semismooth Newton method for nonsmooth nonconvex optimization	RandomM
Salle 21 Build G, Z 6 Intermediate 3x30 min	Advances in DFO III, Chair: Juan C Meza, session 496 JAN FEILING, Utilizing Non-Commutative Maps in Derivative-Free Optimization	RICHARD CARTER, Generalization of DIRECT algorithm supporting interactive problem redefinition	JUAN MEZA, Pattern Search Methods With Surrogates for Surface Structure Determination	DerFree

Specific Models, Algorithms, and Software - Thursday 5:00 PM – 6:30 PM				
FABRE Build J, Z 8 Ground Floor 4x20 min	First-order methods for large-scale convex problems II , <i>Organizer:</i> Stephen A Vavasis, session 318 MADELEINE UDELL, Convex Low Rank Semidefinite Optimization SIMON LACOSTE-JULIEN, Frank-Wolfe Splitting via Augmented Lagrangian Method FRANCOIS GLINEUR, Extending performance estimation beyond exact convex fixed-step methods XUAN VINH DOAN, Low-Storage Conditional Gradient Method for Low-Rank and Sparse Optimization			Learning
Salle 16 Build I, Z 7 2nd floor 4x20 min	Advances in Reinforcement Learning Algorithms , <i>Organizer:</i> Lin Xiao, session 329 MENGDI WANG, Compressive Learning for Sequential Decision Process SHIPRA AGRAWAL, Posterior sampling for reinforcement learning LIHONG LI, SBEED learning: Convergent control with nonlinear function approximation ADITHYA M DEVRAJ, Zap Q-Learning: Fastest Convergent Q-learning			Learning
Salle 22 Build G, Z 6 2nd floor 4x20 min	Ranking and recommendation , <i>Chair:</i> Aleksandra Burashnikova, session 472 ALEKSANDRA BURASHNIKOVA, Learning Online Ranking Models with a Sequential Optimization Algorithm IBRAHIM MUTER, Integrating Individual and Aggregate Diversity in Top-N Recommendation ENGİN TAS, A stochastic gradient descent algorithm for learning to rank JOSE DULA, The Recommender Problem with Convex Hulls			Learning
Salle 24 Build G, Z 6 3rd floor 3x20 min	Vehicle Routing III , <i>Chair:</i> Raquel Bernardino, session 413 RAQUEL BERNARDINO, A hybrid algorithm for the family traveling salesman problem ROGHAYEH HAJIZADEH, Snow removal: Modeling and bounds by relaxation, heuristic and branch-and-bound VITOR NESELLO, Column Generation Based Local Search for Pickup-and-Delivery problems			Logistics
Salle 18 Build I, Z 7 1st floor 4x20 min	Supply Chain , <i>Chair:</i> Daniel Ramón-Lumbierres, session 533 WEI HUANG, Using SAP Integrated Business Planning to Optimize Supply Chain FLORIAN FONTAN, Complexity of processing-time dependent profit maximization scheduling problems ABDESSAMAD OUZIDAN, Modelization and optimization of inventory management for palletization DANIEL RAMÓN-LUMBIERRES, A multistage stochastic programming model for the strategic supply chain design			Scheduling
Salle DENUCE Build Q, Z 8 Ground Floor 3x30 min	Equilibrium and Optimization in Energy Markets , <i>Organizer:</i> Asgeir Tomasgard, session 151 STEVEN GABRIEL, Bilevel Linear Programming Investment Problems Lower-Level Primal and Dual Variables ENDRE BJORN DAL, The Flow-Based Market Coupling Model and the Bidding Zone Configuration ASGEIR TOMASGARD, A European power market model with short- and long-term uncertainty			Energy
Salle 23 Build G, Z 6 3rd floor 3x30 min	Gas Network and Market Optimization , <i>Organizer:</i> Jonas Schweiger, session 293 JONAS SCHWEIGER, Foresighted decision support for gas network operation FELIX HENNINGS, Controlling complex network elements by target values JULIA GRÜBEL, Nonconvex Equilibrium Models for Gas Market Analysis			Energy
Salle LA4 Build L, Z 8 Basement 4x20 min	Medicine and Metabolic engineering , <i>Chair:</i> Mahdi Doostmohammadi, session 396 MICHELLE BOECK, Model Predictive Control and Robust Optimization in Adaptive Radiation Therapy BJÖRN MOREN, Improving a Dose-Volume Model for HDR Brachytherapy to Reduce Tumour Cold Spots AMANDA SMITH, New bilevel formulations for optimizing flux bounds in metabolic engineering MAHDI DOOSTMOHAMMADI, MOMO - Multi-Objective Mixed integer Optimisation for metabolic engineering			Sciences
Salle 9 Build N, Z 12 4th floor 4x20 min	Large-scale combinatorial optimization implementations , <i>Organizer:</i> Aaron Archer, session 96 ANDREW GOLDBERG, Lost in Translation: Production Code Efficiency KEVIN AYDIN, Distributed Balanced Partitioning via Linear Embedding CHRISTIAN SCHULZ, High Quality Graph and Hypergraph Partitioning HOSSEIN BATENI, Solving Coverage Problems on Massive Data			Algo
PITRES Build O, Z 8 Ground Floor 3x30 min	Computational OR in Julia/JuMP , <i>Organizer:</i> Miles Lubin, session 238 MILES LUBIN, JuMP 0.19 and MathOptInterface: new abstractions for mathematical optimization SEBASTIEN MARTIN, Optimizing Public Policy: School Transportation and Start Times in Boston. JARRETT REVELS, Capstan: Next-Generation Automatic Differentiation for Julia			Algo

Invited Talks - Thursday 5:00 PM – 6:30 PM				
SIGALAS Build C, Z 2 2nd floor 4x20 min	Planning , <i>Chair:</i> Jeanjean Antoine, session 389 JEANJEAN ANTOINE, Planning model for recommerce activities BORIS GRIMM, A Propagation Approach for Railway Rolling Stock Optimization ERIC BOURREAU, Real Size Exam Timetabling at Montpellier University (France) MOHAMED BENKIRANE, An Hypergraph Model for the Rolling Stock Rotation Planning and Train Selection			INTERFACE

Room	Discrete Optimization & Integer Programming - Friday 8:30 AM – 10:30 AM			
Salle 43 Build C, Z 1 3rd floor 4x30 min	Recent advances in Integer Optimization , <i>Organizer:</i> Alberto Del Pia, session 218 JEAN-PHILIPP RICHARD, Computational evaluation of new MIP models for tree ensembles optimization DIEGO MORAN, Strong duality for conic mixed-integer programs GUSTAVO ANGULO, An affine bounding method for two-stage stochastic integer programs MERVE BODUR, Aggregation-based cutting-planes for packing and covering integer programs			IPtheory
Salle 35 Build B, Z 4 Intermediate 4x30 min	Mixed Integer Programming Representability , <i>Organizer:</i> Juan Pablo Vielma, session 275 CHRIS RYAN, Mixed-integer linear representability, disjunctions, and Chvátal functions JOEY HUCHETTE, A mixed-integer branching approach for very small formulations MARC PFETSCH, On the Size of Integer Programs with Sparse Constraints or Bounded Coefficients JUAN PABLO VIELMA, Mixed-integer convex representability			IPtheory
Salle 44 Build C, Z 1 3rd floor 4x30 min	Integer Programming and Crew Scheduling , <i>Organizer:</i> Francois Soumis, session 292 FRANCOIS SOUMIS, Dynamic Constraints Aggregation for Crew Scheduling Problem VAHID ZEIGHAMI, Integrated Crew Pairing and Personalized Crew Assignment Problems FRÉDÉRIC QUESNEL, Considering preferences and language skills in the airline crew pairings problem MOHAMMED SADDOUNE, Alternate Lagrangian Decomposition for Integrated Crew Scheduling Problem			IPpractice
Salle 34 Build B, Z 3 1st floor 3x30 min	Optimal Control Problems with Discrete Switches , <i>Organizer:</i> Christian Kirches, session 102 ADRIAN BÜRGER, An Algorithm for Model-Predictive Control of Switched Nonlinear Dynamic Systems FELIX BESTEHORN, Approximation algorithms for MIOCPs with discontinuous switch costs MATTHIAS SCHLOEDER, Numerical Modeling of Switched Systems with Jumps in Optimal Control Problems			MINLP
LEYTEIRE Build E, Z 1 3rd floor 4x30 min	Data-Driven Revenue Management with Customer Choice , <i>Organizer:</i> Jacob Feldman, session 81 ANTOINE DESIR, Constrained Assortment Optimization under the Markov Chain based Choice Model DANNY SEGEV, Near-Optimal Approximations for Dynamic Assortment Planning under the MNL Model ALI AOUAD, Near-Optimal Approximations for Display Optimization Under MNL Preferences JACOB FELDMAN, New Results for Assortment Optimization under the Exponential Choice Model			APPROX
Salle 36 Build B, Z 4 Intermediate 4x30 min	Clustering , <i>Organizer:</i> Zac Friggstad, session 155 ARNAUD DE MESMAY, A Near-Linear Approximation Scheme for Multicuts of Embedded Graphs VINCENT COHEN-ADDAD, On local search for clustering ZAC FRIGGSTAD, Approximation Schemes for Clustering With Outliers ASHKAN NOROUZI FARD, Dynamic Facility Location via Exponential Clocks			APPROX
SIGALAS Build C, Z 2 2nd floor 4x30 min	Matching and scheduling , <i>Organizer:</i> Seffi Naor, session 54 DAVID WAJC, Online Matching in Regular Graphs (and Beyond) SAMIR KHULLER, Coflow Scheduling and beyond GUY EVEN, Best of Two Local Models: Centralized local and Distributed local Algorithms SEFFI NAOR, Competitive Algorithms for Online Multi-level Aggregation			COMB
Salle 41 Build C, Z 1 3rd floor 4x30 min	Recent progress in graph cut problems , <i>Organizer:</i> Karthekeyan Chandrasekaran, session 244 TAMÁS KIRÁLY, Approximation of Linear 3-Cut and related problems EUIWOONG LEE, An FPT Algorithm Beating 2-Approximation for k -Cut YURY MAKARYCHEV, An Integrality Gap for the Călinescu–Karloff–Rabani Relaxation for Multiway Cut KARTHEKEYAN CHANDRASEKARAN, Hypergraph k -cut in randomized polynomial time			COMB
Salle 39 Build E, Z 1 3rd floor 4x30 min	Algorithmic aspects of connectivity in network design , <i>Organizer:</i> Neil Olver, session 264 BUNDIT LAEKHANUKIT, Beyond Metric Embedding: Approximating Group Steiner on Bounded Treewidth Graphs MATEUSZ LEWANDOWSKI, Approximating Node-Weighted k -MST on Planar Graphs ANDRE LINHARES, Improved Algorithms for MST and Metric-TSP Interdiction KANSTANTIN PASHKOVICH, On the Integrality Gap of the Prize-Collecting Steiner Forest LP			COMB
DURKHEIM Build A, Z 1 3rd floor 4x30 min	Graphical Optimization Model 2 , <i>Organizer:</i> Maria I. Restrepo, session 297 SIMON DE GIVRY, Recent algorithmic advances for combinatorial optimization in graphical models THOMAS SCHIEX, Learning and using Graphical models to design new molecules MARIA RESTREPO, Integrated staffing and scheduling for home healthcare DANIEL KOWALCZYK, Solving parallel machine scheduling problems with B and P and decision diagrams			CP

Room	Optimization under Uncertainty - Friday 8:30 AM – 10:30 AM			
DENIGES Build C, Z 5 Ground Floor 4x30 min	Theoretical and practical aspects of decomposition algorithms for multistage stochastic problems: 3 , <i>Organizer:</i> Vincent Leclère, session 245 DAVID MORTON, Distributionally Robust Dual Dynamic Programming ANDY SUN, Stochastic dual dynamic integer programming REGAN BAUCKE, A deterministic algorithm for solving stochastic minimax dynamic programmes VINCENT LECLÈRE, Exact converging bounds for Stochastic Dual Dynamic Programming			Stoch
Salle 32 Build B, Z 5 Ground Floor 4x30 min	New methods for stochastic optimization and variational inequalities , <i>Chair:</i> Yunxiao Deng, session 491 ALFREDO IUSEM, Extragradient method for pseudomonotone stochastic variational inequalities EDUARD GORBUNOV, An Accelerated Randomized Method for Smooth Stochastic Convex Optimization MIHAI ANITESCU, Stochastic Analogues to Deterministic Optimization Methods YUNXIAO DENG, Convex Stochastic Decomposition and Applications to Machine Learning			Stoch
Salle 33 Build B, Z 5 Ground Floor 3x30 min	New Horizons in Robust Optimization , <i>Organizer:</i> Angelos Georgioui, session 447 ZHI CHEN, Data-driven Chance Constrained Programs over Wasserstein Balls KILIAN SCHINDLER, Cardinality-Constrained Clustering and Outlier Detection via Conic Optimization ANGELOS GEORGIOU, A robust optimization prospective to decentralized decision making			Robust
Salle 31 Build B, Z 5 Ground Floor 4x30 min	Advances in theory of dynamic programming , <i>Chair:</i> Stephane L Gaubert, session 385 MAURICIO JUNCA, On controllability of Markov chains: A Markov Decision Processes approach ANGELIKI KAMOUTSI, Stochastic Convex Optimization and Regret Bounds for Apprenticeship Learning NABIL KAHALÉ, Randomized Dimension Reduction for Monte Carlo Simulations NIKOLAS STOTT, Dynamic programming over noncommutative spaces applied to switched systems			Markov
Salle 30 Build B, Z 5 Ground Floor 4x30 min	Algorithmic Game Theory II , <i>Chair:</i> Margarida Carvalho, session 372 ANJA HUBER, Efficient Black-Box Reductions for Separable Cost Sharing MARTON BENEDEK, Finding and verifying the nucleolus of cooperative games CHUANGYIN DANG, Perfect d-Proper Equilibrium and Its Determination MARGARIDA CARVALHO, Kidney Exchange Game			Game

Room	Continuous Optimization - Friday 8:30 AM – 10:30 AM			
Salle 05 Build Q, Z 11 1st floor 4x30 min	First order methods, Organizer: Gerardo Toraldo, session 27 SIMONE REBEGOLDI, Variable metric techniques for the inexact inertial forward-backward algorithm	DANIELA DI SERAFINO, Combining IRN and gradient methods for TV-based Poisson image restoration	WILLIAM HAGER, An Active Set Algorithm for Polyhedral Constrained Optimization	IGNACE LORIS, A line-search based proximal gradient method for (non-)convex optimization NLP
GINTRAC Build Q, Z 8 Ground Floor 4x30 min	Stochastic and Nonlinear Optimization II, Organizer: Jorge Nocedal, session 48 MARK SCHMIDT, "Active-set complexity" of proximal-gradient: How long does it take to find the	DANIEL ROBINSON, A Positive Outlook on Negative Curvature	ALBERT BERAHAS, Derivative-Free Optimization of Noisy Functions via Quasi-Newton Methods	LIN XIAO, Randomized Primal-Dual Algorithms for Asynchronous Distributed Optimization NLP
Salle KC7 Build K, Z 10 Intermediate 2 4x30 min	Regularization and Iterative Methods in Large-Scale Optimization, Organizer: Jacek Gondzio, session 59 PAUL ARMAND, Local analysis of a regularized primal-dual algorithm for NLP without SOSC	DOMINIQUE ORBAN, Implementing a smooth exact penalty function for nonlinear optimization	SPYRIDON POUKGAKIOTIS, Dynamic primal-dual regularization in interior point methods	MICHAEL SAUNDERS, Stabilized Optimization via an NCL Algorithm NLP
Salle 9 Build N, Z 12 4th floor 4x30 min	Decomposition Methods, Chair: Roger Behling, session 431 ROGER BEHLING, Circumcentering the Douglas–Rachford method	LUÍZ-RAFAEL SANTOS, On the linear convergence of the circumcentered-reflection method	YUAN SHEN, Alternating Direction Method of Multipliers for k-means Clustering	LEONARDO GALLI, A Nonmonotone Decomposition Framework: convergence analysis and applications NLP
Salle LC4 Build K, Z 9 Intermediate 1 4x30 min	Geometry in complexity analysis of non-smooth optimization methods, Organizer: Jalal Fadili, session 199 CHARLES DOSSAL, An ODE associated to the Nesterov acceleration scheme	GUILLAUME GARRIGOS, Structured sparsity in inverse problems and support recovery	ANTHONY SO, Error Bound-Based Convergence Rate Analysis of Newton-Type Methods	JALAL FADILI, Finite Activity Identification: Geometry and Algorithms NonSmooth
Salle 8 Build N, Z 12 4th floor 4x30 min	Convergence analysis for non smooth optimization, Organizer: Robert Csetnek, session 557 ROBERT CSETNEK, ADMM for monotone operators: convergence analysis and rates	MATTHIAS FÄLT, Optimal Convergence Rates for Generalized Alternating Projections	ALAIN ZEMKOHO, Newton method for bilevel optimization: Theory+extensive numerical experiments	DENNIS MEIER, Inducing strong convergence into the asymptotic behaviour of proximal splitting NonSmooth
Salle 20 Build G, Z 6 1st floor 4x30 min	Copositive and completely positive optimization, Organizer: Olga Kuryatnikova, session 24 PETER DICKINSON, A New Certificate For Copositivity	MARKUS GABL, Copositive Approach to adjustable robust optimization	JUAN VERA, Using Binary Programming to solve Copositive Optimization Problems	OLGA KURYATNIKOVA, Copositive certificates of non-negativity for polynomials on unbounded sets SDP
Salle LC5 Build L, Z 10 Intermediate 1 4x30 min	Stability and scaling in conic programming, Chair: Diego Cifuentes, session 498 ROLAND HILDEBRAND, Scaling points and reach for non-self-scaled barriers	HECTOR RAMIREZ, Stability Analysis for Parameterized Conic Programs	WEI ZHANG, An improved projection and rescaling algorithm for conic feasible problems	DIEGO CIFUENTES, On the local stability of semidefinite relaxations SDP
Salle 06 Build Q, Z 11 1st floor 4x30 min	Stochastic Optimization and Variational Inequalities, Organizer: Hailin Sun, session 149 HUIFU XU, Behavioural Function Equilibria and Approximation Schemes in Bayesian Games	SHU LU, Inference of two stage stochastic programs using SVI techniques	XIAOJUN CHEN, Theory and algorithms for two-stage stochastic variational inequalities	HAILIN SUN, Sample average approximation of two-stage stochastic generalized equation Variational
Salle ARNOZAN Build G, Z 8 Ground Floor 4x30 min	Variational Analysis 3, Organizer: Johanna Burtscheidt, session 369 JOHANNA BURTSCHIEDT, Stability and Small Application of a Risk Averse CP under Uncertainty	HONGBO DONG, Variable selection with heredity principles by nonconvex optimization	GORAN LESAJA, Adaptive Full Newton-step Infeasible Interior-Point Method for Sufficient HLCP	HENRI BONNEL, Application of Optimization over the Pareto set in Machine Learning Variational
Salle KC6 Build K, Z 10 Intermediate 1 3x30 min	Recent Advances in Coordinate Descent and Constrained Problems, Organizer: Ion Necoara, session 208	NICOLAS LOIZOU, Convergence Analysis of Inexact Randomized Iterative Methods	KONSTANTIN MISHCHENKO, A Stochastic Penalty Model for Optimization with Many Convex Constraints	ION NECOARA, Random coordinate descent methods for linearly constrained convex optimization RandomM
Salle 21 Build G, Z 6 Intermediate 4x30 min	Challenging applications in DFO, Chair: Francesco Rinaldi, session 38 A ISMAEL VAZ, Global Direct Search and an application to Additive Manufacturing (3D Printing)	STEFANO LUCIDI, Derivative-free methods for complex black-box problems	STEVEN GARDNER, Parallel Hybrid Multi-objective Derivative-Free Optimization for Machine Learning	LUKAS ADAM, Robust multi-objective optimization: Application to the recycling of plastics DerFree
Salle AURIAC Build G, Z 6 1st floor 3x30 min	Optimal Control in Engineering Applications, Chair: Maxime Grangereau, session 310 MASOUMEH MOHAMMADI, A Priori Error Estimates for a Linearized Fracture Control Problem	MAXIME GRANGEREAU, Stochastic optimal control of a battery : resolution with McKean-FBSDE	JOHANNA BIEHL, Adaptive Multilevel Optimization of Fluid-Structure Interaction	Control

Room	Specific Models, Algorithms, and Software - Friday 8:30 AM – 10:30 AM			
FABRE Build J, Z 8 Ground Floor 3x30 min	Dimensionality reduction tools for learning: A sketchy session, Organizer: Robert M Gower, session 313		Learning	
	NICOLAS KERIVEN, Sketched Learning with Random Feature Moments	ARTHUR MENSCH, Stochastic Subsampling for Factorizing Huge Matrices	ALESSANDRO RUDI, Optimal kernel methods for large scale machine learning	
Salle 16 Build I, Z 7 2nd floor 4x30 min	Dealing with non-convexity, Chair: Damek Davis, session 473		Learning	
	LEONARD BERRADA, Smoothing Piecewise Linear Loss Functions for Deep Learning	DAMEK DAVIS, Convergence rates of stochastic methods for nonsmooth non-convex problems	CONG MA, Implicit Regularization in Non-convex Statistical Estimation	NAOKI MARUMO, Provable Convex Minimization under Non-convex Submodular-structured Sparsity
Salle 18 Build I, Z 7 1st floor 4x30 min	Telecommunications, Organizer: Edoardo Amaldi, session 361		Network	
	MICHAL PIORO, An Optimization Model for Quadratic Flow Thinning	MATTHIAS ROST, Approximating the Virtual Network Embedding Problem: Theory and Practice	CHAFIQ TITOUNA, DDRA: Distributed Detection and Recovery Algorithm for Wireless Sensor Networks	EDOARDO AMALDI, On the Virtual Network Embedding problem with substrate network expansion
PITRES Build O, Z 8 Ground Floor 4x30 min	Hybrid Algorithms and Matheuristics for VRP, Organizer: Thibaut Vidal, session 181		Logistics	
	THIBAUT VIDAL, Heuristics for vehicle routing problems: Sequence or set optimization?	DOMINIQUE FEILLET, Single Liner Service Design with Speed Optimization	JEAN BERTRAN GAUTHIER, Heuristic pricing for the shortest path problem with resource constraints	PEDRO DINIZ, Garbage Collection Routing With Heterogeneous Fleet
Salle 23 Build G, Z 6 3rd floor 3x30 min	Scheduling Applications, Chair: Mauricio C. de Souza, session 526		Scheduling	
	ATSUKO Ikegami, Generating many optimal solutions in nurse scheduling	DAVAATSEREN BAATAR, Mixed Integer Programming Based Merge Search for Open Pit Block Scheduling	MAURICIO DE SOUZA, Surgical scheduling under uncertainty by approximate dynamic programming	
Salle 24 Build G, Z 6 3rd floor 3x30 min	Power Systems Models with Discrete Decision Variables, Organizer: Adolfo R Escobedo, session 26		Energy	
	KAI PAN, Co-optimizing Energy and Ancillary Services	HARSHA GANGAMMANAVAR, Stochastic Framework for Coordinated Operation of Multiple Microgrids	ADOLFO ESCOBEDO, Generation of Angular Valid Inequalities for Transmission Expansion Planning	
Salle DENUCE Build Q, Z 8 Ground Floor 4x30 min	Machine Learning in State Estimation and Situational Awareness in Power Grids, Organizer: Deepjyoti Deka, session 134		Energy	
	DEEPIYOTI DEKA, Learning with end-users in distribution grids: Topology and parameter estimation	MARC VUFFRAY, Online Learning of Power Transmission Dynamics	MAURO ESCOBAR, Machine learning with PMU signals	DONGCHAN LEE, Convex polytope machine approach for transient stability assessment
Salle LA4 Build L, Z 8 Basement 3x30 min	Finance and Portfolio Optimization, Organizer: Asaf Shupo, session 395		Sciences	
	BENJAMIN HEYMANN, Auction under ROI constraints	GABRIELA KOVACOVA, Time Consistency of the Mean-Risk Problem	ASAF SHUPO, Building Optimal Strategies Using Multi-Objective Optimization	
Salle 22 Build G, Z 6 2nd floor 4x30 min	New Developments in Optimization Modeling Software, Organizer: Robert Fourer, session 101		Algo	
	STEVEN DIRKSE, Enhanced Model Deployment and Solution in GAMS	DAVID GAY, Adding Functions to AMPL	PAUL KERR-DELWORTH, Optimization Modeling in MATLAB	YOUNGDAE KIM, Efficient model generation for decomposition methods in modeling languages

Room	Invited Talks - Friday 11:00 AM – 12:00 AM			
Auditorium Build Symph H, Z 0 Gambetta 1x60 min	Tseng Memorial Lectureship in Continuous Optimization, Organizer: Yaxiang Yuan, session 549			SEMI
LEYTEIRE Build E, Z 1 3rd floor 1x60 min	Majority judgment, Organizer: Martine Labbé, session 535			KEYNOTE
	MICHEL BALINSKI, Majority judgment			
DENIGES Build C, Z 5 Ground Floor 1x60 min	Submodularity in mixed-integer quadratic and conic quadratic optimization, Organizer: Daniel Bienstock, session 540			KEYNOTE
	ALPER ATAMTURK, Submodularity in mixed-integer quadratic and conic quadratic optimization			
BROCA Build W, Z 0 3rd floor 1x60 min	Modern Branch-and-Cut Implementation, Organizer: Marc E Pfetsch, session 542			KEYNOTE
	MATTEO FISCHETTI, Modern Branch-and-Cut Implementation			

Room	Invited Talks - Friday 1:30 PM – 2:30 PM			
Auditorium Build Symph H, Z 0 Gambetta 1x60 min	Bounds for quantum graph parameters by conic and polynomial optimization, Organizer: Frank Vallentin, session 553			PLENARY
	MONIQUE LAURENT, Bounds for quantum graph parameters by conic and polynomial optimization			

Room	Discrete Optimization & Integer Programming - Friday 3:15 PM – 4:45 PM		
Salle 34 Build B, Z 3 1st floor 3x30 min	Polyhedral theory in practice, Organizer: Mourad Baiou, session 309 RAFAEL COLARES, The Stop Number Minimization Problem: polyhedral analysis FRANCISCO BARAHONA, On the nucleolus of shortest path and network disconnection games MOURAD BAIYOU, On some network security games		IPtheory
Salle 42 Build C, Z 1 3rd floor 3x30 min	Extended Formulations, Chair: Bartosz Filipecki, session 514 BERND PERSCHIED, An Extended Formulation for the 1-Wheels of the Stable Set Polytope MIRJAM FRIESEN, Extended formulations for higher-order spanning tree polytopes BARTOSZ FILIPECKI, Stronger Path-based Extended Formulation for the Steiner Tree Problem		IPtheory
Salle 44 Build C, Z 1 3rd floor 3x30 min	Routing, Chair: Cole Smith, session 484 IMKE JOORMANN, Solving the Time-Dependent TSP using Machine Learning Guidance ANN-BRITH STRÖMBERG, Column generation for routing a fleet of plug-in hybrid vehicles COLE SMITH, The consistent path problem and binary decision diagrams		IPpractice
Salle 36 Build B, Z 4 Intermediate 3x30 min	IP Practice III, Chair: Samuel S Brito, session 507 FRANCO QUEZADA, Valid inequalities for solving a stochastic lot-sizing problem with returns SAMUEL BRITO, Improving COIN-OR CBC MIP Solver Using Conflict Graphs MAXIMILIAN JOHN, Two Lower Bound Approaches for the Keyboard Layout Problem		IPpractice
Salle 39 Build E, Z 1 3rd floor 3x30 min	Outer Convexification and Mixed-Integer Optimal Control, Organizer: Sebastian Sager, session 103 PAUL MANNS, Improved Regularity Assumptions for Partial Outer Convexification of MIPDECOs CLEMENS ZEILE, Combinatorial Integral Approximation Decompositions for Mixed-Integer Control OLIVER HABECK, Global optimization of ODE constrained network problems		MINLP
DURKHEIM Build A, Z 1 3rd floor 3x30 min	Intersection cuts, disjunctions, and valid inequalities, Organizer: Eli Towle, session 180 DANIEL BIENSTOCK, Outer-product-free Sets for Polynomial Optimization EGON BALAS, Synthetizing branch-and-bound information into cutting planes ELI TOWLE, Intersection disjunctions for reverse convex sets		MINLP
Salle 35 Build B, Z 4 Intermediate 3x30 min	Branch-and-cut techniques, Organizer: Teodora Dan, session 277 TEODORA DAN, A branch-and-bound algorithm for a bilevel location-allocation model LOVIS ANDERSON, Improving branching for disjunctive models via approximate convex decompositions TU NGUYEN, Learning with Cutting Planes		MINLP
LEYTEIRE Build E, Z 1 3rd floor 3x30 min	Submodular Maximization., Organizer: Justin Ward, session 179 ILIJIA BOGUNOVIC, Robust Maximization of Submodular Objs. in the Presence of Adversarial Removals ALFREDO TORRICO, Robust submodular maximization under matroid constraints AMIN KARBASI, Submodular Optimization: From Discrete to Continuous and Back		APPROX
Salle 43 Build C, Z 1 3rd floor 3x30 min	Submodular and Incremental Maximization, Organizer: Martin Gross, session 340 RAJAN UDWANI, Multi-objective Maximization of Monotone Submodular Functions TASUKU SOMA, A New Approximation Guarantee for Submodular Maximization via Discrete Convexity MARTIN GROSS, General Bounds for Incremental Maximization		APPROX
SIGALAS Build C, Z 2 2nd floor 3x30 min	Combinatorial aspects of Linear Programming, Organizer: Daniel Dadush, session 259 SOPHIE HUIBERTS, A Friendly Smoothed Analysis of the Simplex Method GIACOMO ZAMBELLI, Geometric Rescaling Algorithms for Submodular Function Minimization NEIL OLVER, A Simpler and Faster Strongly Polynomial Algorithm for Generalized Max-Flow		COMB

Room	Optimization under Uncertainty - Friday 3:15 PM – 4:45 PM		
Salle 32 Build B, Z 5 Ground Floor 3x30 min	Risk-aware decision making, Organizer: Minseok Ryu, session 251 HIDEAKI NAKAO, Medical Homecare Delivery with Time-dependent Stochastic Travel Time ZHENG ZHANG, A stochastic programming approach for optimization of latent disease detection MINSEOK RYU, Nurse staffing under uncertain demand and absenteeism		Stoch
Salle 33 Build B, Z 5 Ground Floor 3x30 min	Distributionally Robust Optimization: Models and Applications, Organizer: Selin D Ahipasaoglu, session 355 BIKRAMJIT DAS, Heavy tails in a moment-constrained robust newsvendor model HENRY LAM, Robust Extreme Event Analysis SELIN AHIPASAOGLU, Concentration versus Diversification in Portfolio Selection		Robust
DENIGES Build C, Z 5 Ground Floor 3x30 min	Distributionally Robust Optimization, Organizer: Daniel Kuhn, session 446 NAPAT RUJEERAPAIBOON, Chebyshev Inequalities for Products of Random Variables JOHANNES ROYSET, Variational Theory for Optimization under Stochastic Ambiguity DANIEL KUHN, Distributionally Robust Inverse Covariance Estimation		Robust
Salle 31 Build B, Z 5 Ground Floor 3x30 min	Discrete stochastic dynamic programming, Chair: Adam Narkiewicz, session 384 VICTOR COHEN, MILP formulations for discrete stochastic optimization (LIMIDs) AXEL PARMENTIER, LP relaxations for discrete stochastic optimization with variational inference ADAM NARKIEWICZ, A sequential decision process with stochastic action sets		Markov
Salle 30 Build B, Z 5 Ground Floor 3x30 min	Scalarization, representation and the comparison of methods in Multiobjective Optimization, Chair: Tyler Perini, session 378 KENZA OUFASKA, New scalarization technique for solving multi-objective problems TYLER PERINI, Approximation of the frontier for a biobjective MIP: comparison between methods KATERYNA MUTS, Multi-Objective Optimization for the Compiler of Hard Real-Time Systems		Game

Room	Continuous Optimization - Friday 3:15 PM – 4:45 PM		
GINTRAC Build Q, Z 8 Ground Floor 3x30 min	Interior Point Methods in Engineering Applications I , <i>Organizer:</i> Jacek Gondzio, session 60 SEBASTIAAN BREEDVELD, A (non)convex interior-point implementation tuned for radiotherapy optimisation LOVISA ENGBERG, Refined planning tools for external radiotherapy using interior point methods RENKE KUHLMANN, Computational Study of a Primal-Dual Penalty-Interior-Point Algorithm	NLP	
Salle 05 Build Q, Z 11 1st floor 3x30 min	Nonlinear Optimization , <i>Chair:</i> Marc C Steinbach, session 429 ADEMIR RIBEIRO, On the Approximate Solutions of Augmented Subproblems within Sequential Methods MARC STEINBACH, An Elastic Primal Active Set Method for Structured SQP HAO WANG, A Dynamic Penalty Parameter Updating Strategy for SQP Methods	NLP	
Salle 20 Build G, Z 6 1st floor 3x30 min	Global Optimization 2 , <i>Chair:</i> Mirjam Duer, session 502 CHRISTIAN FÜLLNER, Deterministic upper bounds in global minimization with equality constraints ANDREI ORLOV, Nonconvex Optimization Approach to Equilibrium and Bilevel Problems TATIANA GRUZDEVA, On Solving the General Fractional Problem via D.C. Optimization	Global	
Salle 8 Build N, Z 12 4th floor 3x30 min	Advances in the first-order methods for convex optimization , <i>Organizer:</i> Angelia Nedich, session 73 HOI TO WAI, Accelerated curvature-aided incremental aggregated gradient method TATIANA TATARENKO, Fast Incremental Gradient Method for Optimization with Linear Constraints MARYAM YASHTINI, Efficient Methods For Edge-weighted TV Models with Sphere Constraints	NonSmooth	
Salle LC5 Build L, Z 10 Intermediate 1 3x30 min	Relative Entropy Optimization I , <i>Organizer:</i> Venkat Chandrasekaran, session 111 RILEY MURRAY, Exactness of Relative Entropy Relaxations for Signomial Programs HAMZA FAWZI, Certificates of nonnegativity via conic lifts MICHAL ADAMASZEK, Exponential cone in MOSEK: overview and applications	SDP	
Salle 06 Build Q, Z 11 1st floor 3x30 min	Algorithms for optimization and variational problems with possibly nonisolated solutions II , <i>Organizer:</i> Alexey F. Izmailov, session 153 MIKHAIL SOLODOV, A globally convergent LP-Newton method for piecewise smooth constrained equation DANIEL STECK, Some Developments on Multiplier Methods in Cone-Constrained Optimization PAULO SILVA, On the second order augmented Lagrangian method for MPCC	Variat	
Salle ARNOZAN Build Q, Z 8 Ground Floor 3x30 min	Nash equilibrium and Games 2 , <i>Organizer:</i> Giancarlo Bigi, session 366 LORENZO LAMPARIELLO, Numerically tractable optimistic bilevel problems VADIM SHMYREV, Polyhedral complementarity algorithms for equilibrium problems GIANCARLO BIGI, Semi-infinite programming via two player generalized Nash games and saddlepoints	Variat	
Salle 21 Build G, Z 6 Intermediate 3x30 min	Advances in DFO IV , <i>Chair:</i> Katya Scheinberg, session 125 KRZYSZTOF CHOROMANSKI, New methods for blackbox optimization via structured gradient estimation KATYA SCHEINBERG, Scaling up and Randomizing Derivative Free Optimization for Machine Learning PRASHANT PALKAR, Globally Convergent Simulation-Based Optimization with Integer Variables	DerFree	

Room	Specific Models, Algorithms, and Software - Friday 3:15 PM – 4:45 PM		
Salle 16 Build I, Z 7 2nd floor 3x30 min	Discrete methods for data centers and graphs , <i>Organizer:</i> Aaron Archer, session 477 PHILIPP KELLER, Overcommitment in Cloud Services - Bin Packing with Chance Constraints AARON ARCHER, Cache-aware load balancing of data center applications via balanced partitioning SERGEY PUPYREV, Compressing Graphs and Indexes with Recursive Graph Bisection	Learning	
FABRE Build J, Z 8 Ground Floor 3x30 min	Classification, regression and clustering , <i>Chair:</i> Dimitris Bertsimas, session 480 DIMITRIS BERTSIMAS, Interpretable Machine Learning INÁCIO GUIMARÃES, Logistic Regression and Principal Curves Applied to Discriminant Analysis JAMES BROOKS, Sufficient Conditions for L1-Norm Best-Fit Lines	Learning	
Salle 24 Build G, Z 6 3rd floor 3x30 min	Vehicle Routing II , <i>Chair:</i> Chris N Potts, session 412 EDUARDO UCHOA, A Branch-Cut-and-Price Algorithm for the TSP with Hotel Selection CHRIS POTTS, Models and Algorithms for Dynamic Workforce Scheduling and Routing STEFAN SCHAUDT, Delivery robots, a transport innovation for the last mile	Logistics	
Salle 18 Build I, Z 7 1st floor 3x30 min	Machine Scheduling 1 , <i>Chair:</i> Renan S. Trindade, session 527 NOAM GOLDBERG, Maximum Probabilistic All-or-Nothing Paths and Critical Chains VITALY STRUSEVICH, Max-Cost Scheduling with Controllable Processing Times and a Common Deadline RENAN TRINDADE, An arc-flow formulation for minimizing makespan on a batch processing machine	Scheduling	
Salle DENUCE Build Q, Z 8 Ground Floor 3x30 min	Estimation and Learning for Power Systems , <i>Organizer:</i> Javad Lavaei, session 25 YU ZHANG, Performance Bound for Power System State Estimation via Conic Relaxations RICHARD ZHANG, Spurious Critical Points in Power System State Estimation MING JIN, Vulnerability analysis and robustification of power grid state estimation	Energy	
Salle 22 Build G, Z 6 2nd floor 3x30 min	Optimization in Energy , <i>Chair:</i> Andrea Simonetto, session 515 CHRISTIANO LYRA, Upstream-downstream dynamic programming for optimization of tree-shaped flows MILENA PETKOVIC, Mathematical Programming for Forecasting Supplies and Demands in Gas Networks ANDREA SIMONETTO, Time-varying optimization: algorithms and engineering applications	Energy	
Salle 23 Build G, Z 6 3rd floor 3x30 min	Optimization for Energy System Planning , <i>Chair:</i> Andrew Lu Liu, session 524 LUIGI BOFFINO, Expansion Planning of a Small Size Electric Energy System MARION LEMERY, Regaining tractability in SDDP algorithms for large energy planning problems ANDREW LIU, Capacity Expansion through Decentralized Optimization	Energy	
Salle LA4 Build L, Z 8 Basement 3x30 min	Industrial dynamics and Environmental policy , <i>Organizer:</i> Inmaculada Garcia Fernandez, session 392 ADRIANA PIAZZA, Dynamics of Environmental Policy NILS-HASSAN QUTTINEH, Challenges in Nutrient Recycling and Biogas Plant Localization INMACULADA GARCIA FERNANDEZ, Use of dynamic programming in inventory control for perishable products	Sciences	
PITRES Build O, Z 8 Ground Floor 3x30 min	Computational Integer Programming I , <i>Organizer:</i> Domenico Salvagnin, session 273 TOBIAS ACHTERBERG, Exploiting Degeneracy in MIP PIERRE LE BODIC, Online Estimation of the Size of the Branch and Bound Tree in MIP Solvers ALINSON XAVIER, Multi-Row Intersection Cuts based on the Infinity Norm	Algo	

Room	Discrete Optimization & Integer Programming - Friday 5:00 PM – 6:30 PM			
Salle 34 Build B, Z 3 1st floor 4x20 min	Machine Learning and Discrete Optimization , <i>Organizer:</i> Sebastian Pokutta, session 308 MATTEO FISCHETTI, Building adversarial examples in Neural Networks by Mixed Integer Optimization			IPtheory PAUL GRIGAS, Smart “Predict, then Optimize” SEBASTIAN POKUTTA, Lazy Conditional Gradients through Simpler Oracles
Salle 44 Build C, Z 1 3rd floor 4x20 min	Decomposition II , <i>Chair:</i> Natasha Boland, session 487 ANDRE CIRE, Discrete Nonlinear Optimization by State-Space Decompositions			IPpractice JENS CLAUSEN, Strengthening of mixed integer linear program bounds using variable splitting CRISTIAM GIL, A column generation based model to pickup and delivery problems with trans NATASHIA BOLAND, Decomposition Branching for Mixed Integer Programming
Salle 36 Build B, Z 4 Intermediate 2x20 min	Dual Ascent , <i>Chair:</i> Sara Maqrot, session 505 STEFANIA PAN, A dual ascent procedure for solving the generalized set partitioning model			IPpractice SARA MAQROT, Improving Wedelin’s Heuristic with Sensitivity Analysis for Set Partitioning
DURKHEIM Build A, Z 1 3rd floor 3x30 min	Mixed-Integer PDE-Constrained Optimization , <i>Organizer:</i> Sven Leyffer, session 63 MEENARLI SHARMA, Inversion of Convection-Diffusion PDE with Discrete Source			MINLP MARTIN SIEBENBORN, Shape optimization towards binary variables with PDE constraints MIRKO HAHN, Set-valued steepest descent for binary topology and control optimization
Salle 39 Build E, Z 1 3rd floor 3x30 min	Global Optimization for nonconvex MINLPs , <i>Organizer:</i> Hassan Hijazi, session 92 ANYA CASTILLO, Global Optimization for AC Optimal Power Flow Applications			MINLP HASSAN HIJAZI, Semidefinite Programming Cuts in Gravity HARSHA NAGARAJAN, Tight Piecewise Formulations and Algorithms for Global Optimization of MINLPs
Salle 35 Build B, Z 4 Intermediate 3x30 min	Recent Advances and Applications of MINLP , <i>Organizer:</i> Jose M Ucha, session 139 VICTOR BLANCO, Duality and multidimensional kernels in ℓ_p -Support Vector Machines			MINLP JOSE UCHA, An algebraic exact method for multi-objective RAP in series-parallel systems. JEFFREY ZHANG, On Testing Attainment of the Optimal Value in Nonlinear Optimization
LEYTEIRE Build E, Z 1 3rd floor 4x20 min	Algorithmic Fairness and Optimization , <i>Organizer:</i> Nisheeth K Vishnoi, session 161 KRISHNA GUMMADI, Measuring Algorithmic (Un)Fairness via Inequality Indices			APPROX ELISA CELIS, Controlling Bias in Bandit-based Personalization OMER REINGOLD, Calibration for the (Computationally-Identifiable) Masses NISHEETH VISHNOI, Fair and Diverse DPP-based Data Summarization
Salle 43 Build C, Z 1 3rd floor 3x30 min	Algorithmic Discrepancy , <i>Organizer:</i> Nikhil Bansal, session 164 ALEKSANDAR NIKOLOV, Balancing Vectors in Any Norm			APPROX DANIEL DADUSH, The Gram-Schmidt Walk: A cure to the Banaszczyk Blues REBECCA HOBERG, A Fourier-Analytic Approach For Random Set systems
SIGALAS Build C, Z 2 2nd floor 3x30 min	Packing Steiner Trees , <i>Organizer:</i> Stephan Held, session 260 DIRK MÜLLER, Global Routing with Timing Constraints			COMB PIETRO SACCARDI, Steiner Tree Packing in Rhomboidal Tiles TILMANN BIHLER, Reach- and Direction-Restricted Rectilinear Steiner Trees
Salle 41 Build C, Z 1 3rd floor 4x20 min	Optimization problems in graphs and related , <i>Chair:</i> Claudio Arbib, session 423 XUCUI GUAN, Critical node problem based on connectivity index and properties of components			COMB BINWU ZHANG, Inverse Obnoxious Spanning Tree Problems under Hamming Distance PING ZHAN, The random assignment problem on a full preference domain with submodular MATTEO TONELLI, On uncapacitated metric location and pricing

Room	Optimization under Uncertainty - Friday 5:00 PM – 6:30 PM			
Salle 30 Build B, Z 5 Ground Floor 3x20 min	Topics in stochastic optimization , <i>Chair:</i> Quentin Mercier, session 494 SAKINA MELLOUL, Flexible Multi-choice Goal Programming with Fuzzy Data			Stoch KERSTIN LUX, Optimal inflow control in supply systems with uncertain demands QUENTIN MERCIER, A descent algorithm for stochastic multiobjective optimization problems
Salle 37 Build B, Z 4 Intermediate 4x20 min	Robust Combinatorial Optimization II , <i>Organizer:</i> Agostinho Agra, session 168 AYSE ARSLAN, Robust Strategic Planning of Phytosanitary Treatments in Agriculture			Robust MARCO SILVA, Exact Solution Algorithms for the Robust Total Tardiness Problem AGOSTINHO AGRA, A Lagrangean dual model for the robust inventory problem YASAMAN MOZAFARI, Robust Expansion Planning of Interdependent Electricity, Gas, and Heat
Salle 33 Build B, Z 5 Ground Floor 3x30 min	Wasserstein Distributionally Robust Optimization , <i>Organizer:</i> Peyman Mohajerin Esfaha, session 448 VIET ANH NGUYEN, Risk-Averse Optimization over Structured Wasserstein Ambiguity Set			Robust JOSE BLANCHET, Wasserstein DRO: Modeling and Optimal Choice of Uncertainty Size PEYMAN MOHAJERIN ESFAHA, Data-driven Inverse Optimization with Imperfect Information
Salle 31 Build B, Z 5 Ground Floor 3x30 min	Tractability and approximation algorithms in dynamic programming , <i>Chair:</i> Alexander V. Hopp, session 383 YANN DUJARDIN, Sample-Based Approximate GMDP Solution with Theoretical Guarantees			Markov GIACOMO NANNICINI, An FPTAS for stochastic DP with multidimensional action and scalar state ALEXANDER HOPP, On Friedmann’s subexponential lower bound for Zadeh’s pivot rule

Room	Continuous Optimization - Friday 5:00 PM – 6:30 PM			
GINTRAC Build Q, Z 8 Ground Floor 3x30 min	Moment relaxations for polynomial optimization with symmetries, Organizer: Markus Schweighofer, session 10 FRANK VALLENTIN, Coloring the Voronoi tessellation of lattices			NLP
Salle KC7 Build K, Z 10 Intermediate 2 3x30 min	Subspace methods in NLP II, Organizer: Panos Parpas, session 44 PANOS PARPAS, Distributed Subspace Decomposition	CORDIAN RIENER, Semidefinite optimization and arithmetic progressions	PHILIPPE MOUSTROU, The upper density of sets avoiding norm one in the real space of dimension n	NLP
Salle 05 Build Q, Z 11 1st floor 4x20 min	Primal-dual and ADMM algorithms for nonlinear programming, Organizer: Marco Sciandrone, session 91 AHMET ALACAOGLU, Smooth Primal-Dual Coordinate Descent for Nonsmooth Convex Optimization			NLP
Salle 9 Build N, Z 12 4th floor 3x20 min	Linear Optimization I, Chair: Jianming Shi, session 415 ZHIZE LI, A Fast Polynomial-time Primal-Dual Projection Algorithm for Linear Programming	EMRE MENGİ, Subspace Frameworks for Eigenvalue Optimization	MARIO FIGUEIREDO, ADMM with Plug-and-Play Regularizers: Convergence Guarantees and Applications	NLP
Salle 20 Build G, Z 6 1st floor 3x30 min	Global Optimization 1, Chair: Jean-Baptiste Hiriart-Urruty, session 501 FABIO SCHOEN, New clustering methods for large scale global optimization			Global
Salle 8 Build N, Z 12 4th floor 3x30 min	Nonsmooth DC optimization with applications, Chair: Napsu Karmitsa, session 46 SONA TAHERI, PIECEWISE LINEAR REGRESSION VIA NONSMOOTH DC OPTIMIZATION	SERGIY BUTENKO, Continuous Approaches to Cluster-Detection Problems in Networks	JULIO GONZÁLEZ-DÍAZ, Computational advances in the RLT algorithms: A freely available implementation	NonSmooth
Salle LC4 Build L, Z 9 Intermediate 1 3x30 min	Nonconvex Optimization: Theory and Methods - Part 3, Organizer: Genaro Lopez, session 188 ALEXANDER SHTOF, Globally Solving a Class of Optimal Power Flow Problems in Radial Networks			NonSmooth
Salle AURIAC Build G, Z 6 1st floor 3x30 min	Computer-assisted analyses of optimization algorithms II, Organizer: Adrien Taylor, session 16 ETIENNE DE KLERK, SDP performance analysis of inexact Newton-type methods for self-concordant func	RILEY BADENBROEK, A Universal Interior Point Method Using Hit-and-Run Sampling	ADRIEN TAYLOR, Worst-case analyses of stochastic gradient-based methods using SDPs	SDP
Salle LC5 Build L, Z 10 Intermediate 1 3x30 min	Sparse Semidefinite Programming, Organizer: Somayeh Sojoudi, session 17 MARTIN ANDERSEN, Sparse Semidefinite Relaxations of Communicability-Based Graph Partition Problem	CEDRIC JOSZ, Lasserre hierarchy for large scale polynomial optimization	SOMAYEH SOJOU DI, Fast Algorithms for Max-Det Matrix Completion and Graphical Lasso	SDP
Salle 06 Build Q, Z 11 1st floor 3x30 min	Nonlinear Optimization and Variational Inequalities IV, Organizer: Cong Sun, session 144 JUNFENG YANG, A TVSCAD approach for image deblurring with impulsive noise			Variat
Salle ARNOZAN Build Q, Z 8 Ground Floor 4x20 min	Variational Analysis 2, Organizer: David Salas, session 367 BA KHIET LE, Maximal Monotonicity Arising in Nonsmooth Lur'e Dynamical systems	EMILIO VILCHES, Lyapunov pairs for perturbed sweeping processes	PARIN CHAIPUNYA, Proximal Algorithms in Hadamard Spaces	Variat
Salle KC6 Build K, Z 10 Intermediate 1 4x20 min	Algorithms for Structured Statistical Optimization, Chair: Ilker Birbil, session 349 ILKER BIRBİL, A Differentially Private Stochastic Gradient Descent Algorithm with Smoothing	LIJUN DING, Leave-one-out approach for statistical optimization	GREG ONGIE, Adaptive Sampling for Online Subspace Estimation	RandomM
Salle 21 Build G, Z 6 Intermediate 2x30 min	Derivative-free global optimization algorithms, Chair: Zaikun Zhang, session 41 LIMENG LIU, Optimization with global surrogate and trust-region assisted local search			DerFree

Room	Specific Models, Algorithms, and Software - Friday 5:00 PM – 6:30 PM			
FABRE Build J, Z 8 Ground Floor 4x20 min	Spectral and Semidefinite Methods for Learning, Organizer: Martin Jaggi, session 321 MARYAM FAZEL, Competitive Online Algorithms with Application to Optimal Experiment Design			Learning
Salle 18 Build I, Z 7 1st floor 4x20 min	Transportation networks, Chair: Bernard Gendron, session 359 PARISA CHARKHGARD, The network maintenance problem	MICHAEL FANUEL, Positive semi-definite embedding for dimensionality reduction	KIMON FOUNTOLAKIS, Variational Perspective on Local Graph Clustering	Network
Salle 16 Build I, Z 7 2nd floor 2x20 min	Logistics Networks, Chair: El Hassan Laaziz, session 468 YASUSHI NARUSHIMA, Robust supply chain network equilibrium model with random demands			Logistics
Salle 23 Build G, Z 6 3rd floor 3x30 min	Energy-aware planning and scheduling 2, Organizer: Christian Artigues, session 178 PAUL JAVAL, Modelling uncertainties in short-term operational planning optimization			Energy
Salle 24 Build G, Z 6 3rd floor 3x20 min	Stochastic Methods for Energy Optimization, Chair: Tristan Rigaut, session 294 CLARA LAGE, Stabilization of Price Signals in Energy Optimization	AURÉLIE FRÖGER, Solving an electric vehicle routing problem with capacitated charging stations	CHRISTIAN ARTIGUES, Polyhedral approach for a continuous energy-constrained scheduling problem	Energy
Salle LA4 Build L, Z 8 Basement 4x20 min	Optimization and Game Theory, Organizer: Veerle Timmermans, session 402 MATTHIAS FELDOTTO, Computing Approximate Pure Nash Equilibria in Shapley Value Weighted Congestion	COSIMO VINCI, Dynamic taxes for polynomial congestion games	BJOERN TAUER, Competitive Packet Routing	Sciences
PITRES Build O, Z 8 Ground Floor 3x30 min	Computational Integer Programming II, Organizer: Domenico Salvagnin, session 274 GREGOR HENDEL, Tighter LP relaxations for configuration knapsacks using extended formulations			Algo

