Room	Invited Talks - Monday 11:00 AM – 12:00 AM			
Auditorium Build Symph H, Z 0 Gambetta 1x60 min	**On the relationship between machine learning and optimization**, *Organizer*: 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 Symph H, Z 0 Gambetta 1x60 min	**Multiobjective Optimization with PDE Constraints**, *Organizer*: Stephen J Wright, session 550 Michael Hintermüller, Multiobjective Optimization with PDE Constraints			**SEMI**
SIGALAS Build C, Z 2 2nd floor 1x60 min	**What's happening in nonconvex optimization? A couple of stories**, *Organizer*: Jean-Baptist Hiriart-Urruty, session 536 Emmanuel Candes, What's happening in nonconvex optimization? A couple of stories			**KEYNOTE**
DENIGES Build C, Z 5 Ground Floor 1x60 min	**Theoretical Analysis of Cutting-Planes in IP Solvers.**, *Organizer*: Gerard Cornuejols, session 538 Santanu Dey, Theoretical Analysis of Cutting-Plane Selection in IP Solvers.			**KEYNOTE**

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**, *Organizer*: 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 da	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**, *Organizer*: Marc E Pfetsch, session 56			**MINLP**
	Christoph Brauer, A primal-dual homotopy algorithm for sparse recovery with inf. 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**, *Organizer*: 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)**, *Organizer*: Lars Schewe, session 162			**MINLP**
	Lars Schewe, MIP techniques for instationary 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**, *Organizer*: 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**, *Organizer*: 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**, *Organizer*: Laura Sanità, session 240			**COMB**
	David Adjiashvili, 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**, *Organizer*: 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**, *Organizer*: 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**, *Organizer*: Fabian Bastin, session 287			**Stoch**
	Thuy Anh Ta, On a two-stage stochastic optimization problem with stochastic constraints	Julien Keutchayan, Multistage stochastic optimization: discretization of probability distributions	Michel Gendreau, Effective Heuristics for the Short-Term Hydro-Generation Planning Problem	
DENIGES Build C, Z 5 Ground Floor 3x30 min	**Preference robust optimization**, *Organizer*: Erick Delage, session 166			**Robust**
	William Haskell, Robust choice with multi-attribute quasi-concave choice functions	Jonathan Li, Optimizing aspirational preferences when the choice of a measure is ambiguous	Erick Delage, Utility-based Shortfall Risk Models when Preference Information is Incomplete	
Salle 33 Build B, Z 5 Ground Floor 3x30 min	**Distributionally Robust Optimization - New Theory and Applications**, *Organizer*: Zhichao Zheng, session 356			**Robust**
	Yini Gao, Data-Driven Bounded Rationality in Games- A Robust Framework	Cagil Kocyigit, Distributionally Robust Mechanism Design	Zhichao Zheng, Schedule Reliability in Liner Shipping by Distributionally Robust Optimization	
Salle 31 Build B, Z 5 Ground Floor 3x30 min	**Approximate dynamic programming**, *Organizer*: David Brown, session 159			**Markov**
	Martin Haugh, Information Relaxation Bounds for Partially Observed Markov Decision Processes	Huseyin Topaloglu, Approximate Dynamic Programming for Dynamic Assortment Optimization	David Brown, Approximations to Stochastic Dynamic Programs via Information Relaxation Duality	
Salle 30 Build B, Z 5 Ground Floor 3x30 min	**Risk and Energy Markets**, *Chair*: Julio Deride, session 376			**Game**
	Olivier Huber, On solving risk-averse equilibrium problems via reformulations	Henri Gerard, On risk averse competitive equilibrium	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**, *Organizer*: Jiawang Nie, session 5			**NLP**
	Jean Lasserre, Sparse Polynomial Interpolation: Compressed Sensing, Super-resolution, or Prony?	Stephane Gaubert, Eigenvalues inequalities for nonnegative tensors and their tropical analogues	Harm Derksen, Signal Denoising, Tensors and Singular Values	
Salle 05 Build Q, Z 11 1st floor 3x30 min	**Convex regularization and inverse problems**, *Organizer*: Pierre Weiss, session 216			**NLP**
	Vincent Duval, T-systems for super-resolution microscopy	Frederic De Gournay, Convex regularisation, sparsity and representation theorem	Jonas Kahn, Bounds on the size of polyedral cones	
Salle KC7 Build K, Z 10 Intermediate 2 3x30 min	**Sparse Recovery**, *Chair*: Mustafa C Pinar, session 432			**NLP**
	John Chinneck, LP-based Sparse Solutions Revisited	Mustafa Pinar, Sparse Recovery and Convex Quadratic Splines	Olof Troeng, Efficient ℓ_0 Trend Filtering	
Salle 8 Build N, Z 12 4th floor 3x30 min	**Nonconvex Optimization: Theory and Methods - Part 1**, *Organizer*: Shoham Sabach, session 184			**NonSmooth**
	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	Shoham Sabach, Nonconvex Lagrangian-Based Optimization: Schemes and Global Convergence	
Salle 9 Build N, Z 12 4th floor 2x30 min	**Adaptivity in non smooth optimization**, *Organizer*: Masaru Ito, session 558			**NonSmooth**
	Masaru Ito, An adaptive first order method for weakly smooth and uniformly convex problems	Somayya Komal, A Subgradient Algorithm for solving variational Inequality Problem		
Salle 20 Build G, Z 6 1st floor 3x30 min	**Using SDP relaxations and solving them faster**, *Organizer*: Elisabeth Gaar, session 113			**SDP**
	Samuel Burer, Exact SDPs for a Class of (Random and Non-Random) Nonconvex QCQPs	Nicolo Gusmeroli, SDP Based Solution Methods for Binary Quadratic Problems	Yuzixuan Zhu, Sieve-SDP: A simple facial reduction algorithm to preprocess SDPs	
Salle LC5 Build L, Z 10 Intermediate 1 3x30 min	**Algorithms for nonlinear conic problems**, *Chair*: Takayuki Okuno, session 463			**SDP**
	Leonardo Mito, Augmented Lagrangian for nonlinear SDPs applied to the covering problem	Cunlu Zhou, Long-Step Path-Following Algorithm for Nonlinear Symmetric Programming Problems	Takayuki Okuno, A primal-dual path following method for nonlinear semi-infinite SDPs	
Salle 06 Build Q, Z 11 1st floor 3x30 min	**Proximal Methods for Structured Problems**, *Organizer*: Ting Kei Pong, session 147			**Variat**
	Tianxiang Liu, A successive DC approximation method for nonconvex nonsmooth optimization	Man-Chung Yue, Cubic Regularization Revisited: Faster (Local) Rates under Weaker Assumptions	Ting Kei Pong, Iteratively reweighted l1 algorithms with extrapolation	
Salle ARNOZAN Build Q, Z 8 Ground Floor 3x30 min	**Algorithms for optimization and variational problems with possibly nonisolated solutions I**, *Organizer*: Andreas Fischer, session 152			**Variat**
	Nico Strasdat, A special complementarity function revisited	Alexey Izmailov, Critical solutions of nonlinear equations: attraction for Newton-type methods	Andreas Fischer, Local attraction of Newton methods to critical solutions of constrained systems	
Salle KC6 Build K, Z 10 Intermediate 1 3x30 min	**Coordinate Descent and Randomized Direct Search Methods**, *Organizer*: Martin Takac, session 211			**RandomM**
	Asu Ozdaglar, When Cyclic Coordinate Descent Outperforms Randomized Coordinate Descent	El houcine Bergou, Random direct search method for unconstrained smooth minimization	Dimitri Papageorgiou, Active Metric Learning for Supervised Classification	
Salle 21 Build G, Z 6 Intermediate 3x30 min	**Mixed-integer derivative-free optimization**, *Chair*: Clément Royer, session 80			**DerFree**
	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	Ubaldo Garcia Palomares, A unified approach for solving mixed integer Box-Constrained optimization	
Salle AURIAC Build G, Z 6 1st floor 3x30 min	**Theory and Methods for ODE- and PDE-Constrained Optimization 1**, *Chair*: Carl M Greiff, session 331			**Control**
	Behzad Azmi, On the Barzilai-Borwein step-sizes in Hilbert spaces	Benjamin Horn, Shape Optimization with Stress Constraints for Frictional Contact Problems	Carl Greiff, Quadratic programmimg 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			**Learning**
	Franck Iutzeler, Distributed Optimization with Sparse Communications and Structure Identification	Guanghui Lan, Random gradient extrapolation for distributed and stochastic optimization	Alexander Gasnikov, Distributed Computation of Wasserstein Barycenters over Networks	
Salle 16 Build I, Z 7 2nd floor 3x30 min	**Decisions and learning from data**, *Chair*: Christopher McCord, session 481			**Learning**
	Cédric Rommel, Gaussian mixture penalization for trajectory optimization problems	Christopher McCord, Optimization over Continuous Decisions with Observational Data	Oskar Schneider, Combining Machine Learning and Optimization: Learning to emulate an expert	
PITRES Build O, Z 8 Ground Floor 3x30 min	**Facility Layout**, *Chair*: Anders N Gullhav, session 450			**Logistics**
	Mirko Dahlbeck, Combinatorial Bounds for the (extended) Double Row Facility Layout Problem	Anders Gullhav, A Matheuristic Approach to the Hospital Facility Layout Problem	Hanane Khamlichi, A Multi task robot layout optimization with inventory lot-sizing problem	
Salle 23 Build G, Z 6 3rd floor 3x30 min	**Combinatorial Optimization in Chip Design**, *Organizer*: Stefan Hougardy, session 257			**Scheduling**
	Ulrich Brenner, Faster Adder Circuits for Inputs with Prescribed Arrival Times	Pascal Cremer, BonnCell: Automatic Cell Layout for 7nm Processors	Siad Daboul, Provably Fast and Near-Optimum Gate Sizing	
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			**Energy**
	Manuel Ruiz, Solving an Optimal Power Flow (OPF) problem with preventive security constraints	Miguel Anjos, Tight-and-Cheap Conic Relaxation for the AC Optimal Power Flow Problem	Mostafa Sahraei Ardakani, Coordinated Planning and Operation of M-FACTS and Transmission Switching	
Salle 24 Build G, Z 6 3rd floor 3x30 min	**Topics in power systems**, *Organizer*: Alberto J Lamadrid, session 438			**Energy**
	Giulia De Zotti, Consumers Flexibility Estimation at the TSO Level for Balancing Services	Joshua Taylor, Decentralized control of DC-segmented power systems	Alberto Lamadrid, Response to Disruptions in Electricity with Stochastic Microgrids	
Salle LA4 Build L, Z 8 Basement 3x30 min	**Portfolio Optimization**, *Chair*: Bernardo K. Pagnoncelli, session 393			**Sciences**
	Luca Mencarelli, A Multiplicative Weights Update Algorithm for Portfolio Selection Problems	Bernardo Pagnoncelli, Regularized portfolio optimization with risk measures	Sina Yansori, Log-optimal portfolios under random horizon	
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			**Algo**
	Jose Herskovits, A feasible direction interior point algorithm for linear programming	Stefano Nasini, A specialized interior-point algorithm for very large minimum cost flows in bipa		
Salle 18 Build I, Z 7 1st floor 3x30 min	**Advances in Linear, Non Linear and Mixed-Integer Optimization**, *Chair*: Hiroshige Dan, session 400			**Algo**
	Erik Mühmer, Computational Experiments with Nested Dantzig-Wolfe Decompositions	Xavier Schepler, Restrict-and-fix: a constructive heuristic for mixed-integer programs	Hiroshige Dan, Automatic Differentiation Software for Indexed Optimization Problems	

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			**IPtheory**
	Gennadiy Averkov, Approximation of corner polyhedra with intersection cuts	Timm Oertel, The Support of Integer Optimal Solutions	Iskander Aliev, Distances to Lattice Points in Knapsack Polyhedra	
Salle 44 Build C, Z 1 3rd floor 4x20 min	**Data Mining**, *Chair*: Marcus V Poggi, session 504			**IPpractice**
	Takahiro Kan, A weighting local search for huge assignment problems in item recommendation	Atsushi Miyauchi, Exact Clustering via Integer Programming and Maximum Satisfiability	Dennis Kreber, The best subset selection problem in regression	Marcus Poggi, Cut and Column Generation for Process Discovery
Salle 36 Build B, Z 4 Intermediate 4x20 min	**IP Practice II**, *Chair*: Petra M. Bartmeyer, session 508			**IPpractice**
	Gaël Guillot, Application of the SSSDP method to combinatorial optimisation problems	Yi-Shuai Niu, A Parallel Branch and Bound with DC Algorithm for Mixed Integer Optimization	Quentin Viaud, Two-dimensional bin packing problem with defects on bins	Petra Bartmeyer, A new approach to relax the binary variables on binary quadratic problems
DURKHEIM Build A, Z 1 3rd floor 3x30 min	**Mixed-Integer Conic Optimization**, *Organizer*: Sven Wiese, session 57			**MINLP**
	Lucas Letocart, Exact methods based on SDP for the k-item quadratic knapsack problem	Tristan Gally, Knapsack Constraints over the Positive Semidefinite Cone	Sven Wiese, The Mixed-integer Conic Optimizer in MOSEK	
Salle 39 Build E, Z 1 3rd floor 3x30 min	**Polynomial optimization in binary variables**, *Organizer*: Elisabeth Rodriguez-Heck, session 58			**MINLP**
	Arnaud Lazare, Unconstrained 0-1 polynomial optimization through convex quadratic reformulation	Anja Fischer, A study of specially structured polynomial matroid optimization problems	Elisabeth Rodriguez-Heck, Linear and quadratic reformulations of nonlinear 0-1 optimization problems	
Salle 35 Build B, Z 4 Intermediate 3x30 min	**MINLP methods in gas transport optimization (II)**, *Organizer*: Lars Schewe, session 163			**MINLP**
	Benjamin Hiller, Exploiting acyclic orientations to solve nonlinear potential-based flow problems	Kai Becker, ASTS-Orientations on Undirected Graphs - A tool for optimizing network flows	Johannes Thürauf, Robust Optimal Discrete Arc Sizing for Tree-Shaped Potential Networks	
LEYTEIRE Build E, Z 1 3rd floor 3x30 min	**Scheduling and File Migration**, *Chair*: Asaf Levin, session 345			**APPROX**
	Liliana Grigoriu, Scheduling on Uniform Nonsimultaneous Parallel Machines	Marcin Bienkowski, On phase-based algorithms for online file migration	Asaf Levin, A unified framework for designing EPTAS's for load balancing on parallel machine	
Salle 43 Build C, Z 1 3rd floor 4x20 min	**Algorithms for matching markets**, *Organizer*: Amin Saberi, session 467			**APPROX**
	Arash Asadpour, Concise Bidding Through Dependent Randomized Rounding	Balasubraman Sivan, Robust Repeated Auctions under Heterogeneous Buyer Behavior	Vahab Mirrokni, Proportional Allocation: Simple, Distributed, and Diverse Matching w High Entropy	Amin Saberi, Matching in dynamic environments
SIGALAS Build C, Z 2 2nd floor 4x20 min	**Combinatorial optimization and convexity**, *Chair*: Yu Yokoi, session 424			**COMB**
	Yuni Iwamasa, Discrete convexity in binary VCSPs	Fei Wang, Low matrix completion by a majorized penalty approach	Georg Loho, Abstract tropical linear programming	Yu Yokoi, List Supermodular Coloring
Salle 41 Build C, Z 1 3rd floor 4x20 min	**Practical aspects of network optimization**, *Chair*: Kai Hoppmann, session 427			**COMB**
	Sonia Vanier, Energy-Efficient in Multi-Hop Wireless Networks Problem	Keisuke Hotta, Optimal division for the multi-member constituency system	Saman Eskandarzadeh, Maintenance Scheduling in a Railway Corridor	Kai Hoppmann, Pushing a Network to its Limits - Finding Maximum Min-Cost-Flows

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**, *Organizer*: Ran Ji, session 250			**Stoch**
	Yiling Zhang, Ambiguous Chance-constrained Binary Programs Under Mean-covariance Information	Karthyek Murthy, Distributionally Robust Optimization with optimal transport (Wasserstein) costs	Ran Ji, Distributionally Robust Chance-Constrained Optimization with Wasserstein Metric	
Salle 30 Build B, Z 5 Ground Floor 3x20 min	**Differentiability, convexity, and modeling in stochastic optimization**, *Chair*: Kai A. Spuerkel, session 493			**Stoch**
	Holger Heitsch, Stochastic optimization with probabilistic/robust (probust) constraints	Pedro Perez-Aros, Subdifferential characterization of probability functions	Kai Spuerkel, Strong Convexity in Stochastic Programming with Deviation Risk Measures	
DENIGES Build C, Z 5 Ground Floor 3x30 min	**Advances in Adjustable Robust Optimization**, *Organizer*: Do Young Yoon, session 350			**Robust**
	Dick den Hertog, Robust optimization for models with uncertain SOC and SDP constraints	Ernst Roos, Approximation of uncertain convex inequalities	Do Young Yoon, Monitoring with Limited Information	
Salle 37 Build B, Z 4 Intermediate 3x20 min	**New models in robust optimization**, *Chair*: Juan S Borrero, session 459			**Robust**
	Jaeyoong Lim, On using cardinality constrained uncertainty for objective coefficients	Philip Kolvenbach, Robust optimization of PDE-constrained problems using second-order methods	Juan Borrero, Robust optimization with non-convex uncertainty sets	
Salle 31 Build B, Z 5 Ground Floor 2x30 min	**Learning and dynamic programming**, *Chair*: Boxiao Chen, session 381			**Markov**
	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		

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**, *Organizer*: Igor Konnov, session 4			**NLP**
	Igor Konnov, Simple Adaptive Versions of Iterative Optimization Methods	Alexander Zaslavski, Subgradient Projection Algorithm with Computational Errors	Andrea Cristofari, An active-set framework for minimizing nonconvex functions over the simplex	
Salle 05 Build Q, Z 11 1st floor 4x20 min	**Polynomial and tensor optimization III**, *Organizer*: Jiawang Nie, session 7			**NLP**
	Lek-Heng Lim, Higher order cone programming	Ke Ye, Ranks and decompositions of Hankel tensors	Annie Raymond, Symmetric Sums of Squares over k-Subset Hypercubes	Jiawang Nie, Tight relaxations for polynomial optimization and lagrange multiplier expression
Salle 9 Build N, Z 12 4th floor 3x20 min	**Modeling in NLP**, *Chair*: Laura Balzano, session 433			**NLP**
	Laura Balzano, Low Algebraic Dimension Matrix Completion	Mirai Tanaka, DC programming algorithm for fully convex bilevel optimization	Nuttapol Pakkaranang, An inertial proximal point methods for solving minimization problems	
Salle 8 Build N, Z 12 4th floor 3x30 min	**Extending the Reach of First-Order Methods, Part I**, *Organizer*: Haihao Lu, session 285			**NonSmooth**
	Benjamin Grimmer, Subgradient Method Convergence Rates without Lipschitz Continuity or Convexity	Yurii Nesterov, Relative smoothness condition and its application to third-order methods.	Haihao Lu, Generalized Stochastic Frank-Wolfe Method	
Salle 20 Build G, Z 6 1st floor 3x30 min	**Solving large scale convex composite programming**, *Organizer*: Kim-Chuan Toh, session 130			**SDP**
	Kim-Chuan Toh, A block symmetric Gauss-Seidel decomposition theorem for convex composite QP	Xin Yee Lam, Fast algorithms for large scale generalized distance weighted discrimination	Yancheng Yuan, An Efficient Semismooth Newton Based Algorithm for Convex Clustering	
Salle LC5 Build L, Z 10 Intermediate 1 3x30 min	**Convergence and Approximation in Conic Programming**, *Chair*: Tamás Terlaky, session 465			**SDP**
	Nuri Vanli, Convergence Rate of Block Coordinate Ascent for Nonconvex Burer-Monteiro Method	Yuriy Zinchenko, Towards efficient approximation of p-cones	Tamás Terlaky, Quadratic convergence to the optimal solution of second-order conic optimization	
Salle 06 Build Q, Z 11 1st floor 4x20 min	**Nonlinear Optimization and Variational Inequalities VI**, *Organizer*: Cong Sun, session 146			**Variat**
	Fengmin Xu, Balance analysis of sparsity and robustness for portfolio adjustment problem	Chao Zhang, Two-stage stochastic program and stochastic variational inequalities	Xiao Wang, Proximal Stochastic Quasi-Newton methods for Nonconvex Composite Optimization	Zhongming Wu, General inertial proximal gradient method for nonconvex nonsmooth optimization
Salle ARNOZAN Build Q, Z 8 Ground Floor 4x20 min	**Variational Analysis 4**, *Organizer*: Jo A. Brueggemann, session 370			**Variat**
	Jo Brueggemann, Path-following method for a class of obstacle problems with integral constraints	Yboon García Ramos, Nonconvex integration using ϵ-subdifferentials	Yakui Huang, A family of two-point step-size gradient methods	Khoa Nguyen, Proximal alternating direction method of multipliers in the nonconvex setting
Salle KC6 Build K, Z 10 Intermediate 1 3x20 min	**Complexity of Randomized Algorithms**, *Organizer*: Raghu Pasupathy, session 347			**RandomM**
	Martin Morin, On the Convergence of SAGA-like Algorithms	Bang Vu, On the linear convergence of the projected stochastic gradient method	Raghu Pasupathy, The Complexity of Adaptive Sampling Accelerated Gradient Dsescent	
Salle 21 Build G, Z 6 Intermediate 3x30 min	**Advances in DFO I**, *Chair*: Sébastien Le Digabel, session 40			**DerFree**
	Warren Hare, Calculus Rules of the Simplex Gradient	Miguel Munoz Zuniga, Derivative free global Optimization with categorical-continuous variables	Stefan Wild, A Taxonomy of Constraints for Blackbox-Based Optimization	
Salle AURIAC Build G, Z 6 1st floor 4x20 min	**Advances in optimization methods for time dependent problems:I**, *Organizer*: Matthias Heinkenschloss, session 223			**Control**
	Mihai Anitescu, Exponentially convergent receding horizon constrained optimal control	Carl Laird, Parallel strategies for DAE optimization with direct Schur-complement decomp.	Johannes Haubner, Shape optimization for unsteady fluid-structure interaction	Matthias Heinkenschloss, A parallel-in-time gradient-type method for optimal control problems

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**, *Organizer*: 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**, *Organizer*: 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 Rontsis, 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**, *Chair*: 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**, *Chair*: 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**, *Chair*: 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**, *Organizer*: 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**, *Organizer*: 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**, *Organizer*: Peter Gritzmann, 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**, *Organizer*: Jordi Castro, session 352			**Algo**
	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**, *Organizer*: 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**, *Organizer*: 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**, *Chair*: 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 superadditive duality
Salle 44 Build C, Z 1 3rd floor 4x30 min	**Machine Learning for Optimization**, *Organizer*: 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**, *Organizer*: 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**, *Organizer*: 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**, *Organizer*: Jochen Koenemann, session 241			**COMB**
	Zhuan Khye Koh, Stabilizing Weighted Graphs	Justin Toth, 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**, *Organizer*: 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**, *Chair*: 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**, *Organizer*: 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**, *Organizer*: Andrzej Ruszczynski, session 252			**Stoch**
	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 Ruszczynski, Risk Disintegration with Application to Partially Observable Systems
Salle 37 Build B, Z 4 Intermediate 3x30 min	**Nonlinear Optimization with Uncertain Constraints**, *Organizer*: Charlie Vanaret, session 110			**Robust**
		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
Salle 33 Build B, Z 5 Ground Floor 3x30 min	**Robust Optimization and Operations Mangement**, *Organizer*: Chaithanya Bandi, session 410			**Robust**
		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
Salle 31 Build B, Z 5 Ground Floor 4x30 min	**Algorithms for stochastic games : new approaches**, *Organizer*: Hugo Gimbert, session 137			**Markov**
	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
Salle 30 Build B, Z 5 Ground Floor 4x30 min	**Algorithmic Game Theory I**, *Organizer*: Luce Brotcorne, session 311			**Game**
	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

Room	Continuous Optimization - Tuesday 8:30 AM – 10:30 AM			
GINTRAC Build Q, Z 8 Ground Floor 4x30 min	**Stochastic and Nonlinear Optimization I**, *Organizer*: Jorge Nocedal, session 47			**NLP**
	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
Salle 05 Build Q, Z 11 1st floor 4x30 min	**Machine learning and sparse optimisation** , *Organizer*: Coralia Cartis, session 109			**NLP**
	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
Salle KC7 Build K, Z 10 Intermediate 2 4x30 min	**Unconstrained Optimization**, *Chair*: Ekkehard Sachs, session 401			**NLP**
	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
Salle LC4 Build L, Z 9 Intermediate 1 4x30 min	**Advances in Bundle Methods for Convex Optimization**, *Organizer*: Christoph Helmberg, session 93			**NonSmooth**
	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
Salle 8 Build N, Z 12 4th floor 4x30 min	**Addressing problems with complex geometries**, *Organizer*: Edouard Pauwels, session 229			**NonSmooth**
	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
Salle 20 Build G, Z 6 1st floor 4x30 min	**Algebraic and geometric aspects of semidefinite programming**, *Organizer*: Hamza Fawzi, session 85			**SDP**
	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
Salle LC5 Build L, Z 10 Intermediate 1 4x30 min	**Theory and algorithms in conic linear programming 1**, *Organizer*: Gabor Pataki, session 88			**SDP**
	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
Salle 06 Build Q, Z 11 1st floor 4x30 min	**Nonlinear Optimization and Variational Inequalities V**, *Organizer*: Xin Liu, session 145			**Variat**
	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
Salle ARNOZAN Build Q, Z 8 Ground Floor 4x30 min	**Optmization Algorithms and Variational Inequalites I**, *Organizer*: Bo Jiang, session 148			**Variat**
	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
Salle KC6 Build K, Z 10 Intermediate 1 4x30 min	**Larges Scale and Distributed Optimization**, *Organizer*: Ermin Wei, session 214			**RandomM**
	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
Salle 21 Build G, Z 6 Intermediate 4x30 min	**Bayesian and Randomized Optimization II**, *Chair*: Youssef Diouane, session 79			**DerFree**
	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
Salle AURIAC Build G, Z 6 1st floor 4x30 min	**Optimization Methods for PDE Constrained Problems** , *Organizer*: Michael Ulbrich, session 221			**Control**
	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

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			**Learning**
	Jonathan Weed, Near-linear time approximation algorithms for optimal transport	Andreas Elsener, 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
Salle DENUCE Build Q, Z 8 Ground Floor 4x30 min	**Statistics meets optimization: going beyond convexity**, *Organizer*: John Duchi, session 337			**Learning**
	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	Rina Barber, Optimal iterative thresholding algorithms for sparse optimization
Salle 22 Build G, Z 6 2nd floor 4x30 min	**Pricing**, *Chair*: Anastasiya Ivanova, session 478			**Learning**
	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
Salle 18 Build I, Z 7 1st floor 4x30 min	**Path and tree problems**, *Chair*: Arthur J Delarue, session 360			**Network**
	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
Salle 16 Build I, Z 7 2nd floor 3x30 min	**Facility Location**, *Chair*: Ivan Contreras, session 414			**Logistics**
		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
Salle 23 Build G, Z 6 3rd floor 4x30 min	**Electric Vehicles and Decarbonization**, *Chair*: Martim Joyce-Moniz, session 519			**Energy**
	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
Salle 24 Build G, Z 6 3rd floor 4x30 min	**Risk Models for Electricity Markets**, *Chair*: Michael C Ferris, session 521			**Energy**
	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
Salle LA4 Build L, Z 8 Basement 4x30 min	**Interval Global Optimization**, *Organizer*: Frederic Messine, session 339			**Sciences**
	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
PITRES Build O, Z 8 Ground Floor 4x30 min	**LP, Mixed Integer Convex Programming and Decomposition**, *Organizer*: Thorsten Koch, session 236			**Algo**
	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

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 **SEMI** Melvyn Sim, Adaptive Robust Optimization with Scenario-wise Ambiguity Sets			
DENIGES Build C, Z 5 Ground Floor 1x60 min	**Asymptotic Lagrangian duality for nonsmooth optimization**, *Organizer*: Xiaojun Chen, session 541 **KEYNOTE** Regina Burachik, Asymptotic Lagrangian duality for nonsmooth optimization			
BROCA Build W, Z 0 3rd floor 1x60 min	**Lower bounds on the size of linear programs**, *Organizer*: Volker Kaibel, session 545 **KEYNOTE** Thomas Rothvoss, Lower Bounds on the Size of Linear Programs			

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**, *Organizer*: Simge Kucukyavuz, session 232			**IPtheory**
	Manish Bansal, Two-stage stochastic p-order conic mixed integer programs	Ward Romeijnders, 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**, *Organizer*: Christopher Hojny, session 129			**IPpractice**
	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**, *Organizer*: Boshi Yang, session 107			**MINLP**
	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**, *Organizer*: Adam N Letchford, session 278			**MINLP**
	Borzou Rostami, A convex reformulation and an outer approximation for a class of BQP	Felipe Serrano, Separating over the convex hull of MINL constraints	Adam Letchford, Bi-Perspective Cuts for Mixed-Integer Fractional Programs	
Salle 35 Build B, Z 4 Intermediate 3x30 min	**Applications of MINLP**, *Organizer*: Dolores Romero Morales, session 281			**MINLP**
	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**, *Organizer*: David Shmoys, session 22			**APPROX**
	Anthony Kim, Minimizing Latency in Online 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**, *Organizer*: Felix Willamowski, session 342			**APPROX**
	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**, *Organizer*: Ruben Hoeksma, session 258			**COMB**
	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**, *Chair*: Satoru Iwata, session 418			**COMB**
	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**, *Organizer*: Guzin Bayraksan, session 249			**Stoch**
	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**, *Organizer*: Phebe Vayanos, session 442			**Robust**
	Vishal Gupta, Optimization in the Small-Data, Large-Scale Regime	Velibor 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**, *Organizer*: Wolfram Wiesemann, session 445			**Robust**
	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**, *Chair*: Dan A Iancu, session 380			**Markov**
	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**, *Chair*: Didier Aussel, session 375			**Game**
	Anton Svensson, Constraint quali cations for parametrized optimization problems and applications	Léonard vonNiederhäusern, TrEMa: A Trilevel Energy Market Model	Didier Aussel, Electricity market model with elastic demand	

Room	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**, *Organizer*: Etienne De Klerk, session 2			**NLP**
	Amir Ali Ahmadi, LP, SOCP, and Optimization-Free Approaches to Polynomial Optimization	Krzysztof Postek, Distributionally robust optimization with SOS polynomial density functions and m	Georgina Hall, Nonnegative polynomials, and applications to learning	
Salle KC7 Build K, Z 10 Intermediate 2 3x30 min	**Bridging NLP and Theoretical Computer Science**, *Organizer*: Aleksander Madry, session 51			**NLP**
	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	
Salle 05 Build Q, Z 11 1st floor 2x30 min	**Interior Point Methods in Engineering Applications II**, *Organizer*: Jacek Gondzio, session 61			**NLP**
	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		
Salle 9 Build N, Z 12 4th floor 3x30 min	**Linear Optimization III**, *Chair*: Rodrigo Mendoza Smith, session 439			**NLP**
	Rodrigo Mendoza Smith, Neural constraint selection in Linear Programming	Chu Nguyen, New station cone algorithm variant for linear programming and computing experiment	Khalid El Yassini, A predictor-corrector algorithm for lp problems using the mixed penalty approach	
Salle 8 Build N, Z 12 4th floor 3x30 min	**Nonconvex Optimization: Theory and Methods - Part 2**, *Organizer*: Russell Luke, session 186			**NonSmooth**
	Guoyin Li, Splitting methods for nonconvex feasibility problems	Patrick Johnstone, Projective Splitting with Forward Steps	Russell Luke, Convergence Analysis for Nonconvex Optimization Made Easy	
Salle 20 Build G, Z 6 1st floor 3x30 min	**Recent Advances in Conic Programming I**, *Organizer*: Makoto Yamashita, session 82			**SDP**
	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	
Salle LC5 Build L, Z 10 Intermediate 1 3x30 min	**Relative Entropy Optimization II**, *Organizer*: Venkat Chandrasekaran, session 112			**SDP**
	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	
Salle 06 Build Q, Z 11 1st floor 3x30 min	**Nonlinear Optimization and Variational Inequalities III**, *Organizer*: Xin Liu, session 143			**Variat**
	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	
Salle KC6 Build K, Z 10 Intermediate 1 3x30 min	**Recent Advances in Stochastic and Non-convex Optimization II**, *Organizer*: Mingyi Hong, session 304			**RandomM**
	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	
Salle 21 Build G, Z 6 Intermediate 3x30 min	**Advances in DFO II**, *Chair*: Warren Hare, session 37			**DerFree**
	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	
Salle AURIAC Build G, Z 6 1st floor 3x30 min	**Optimal Control and PDE Constrained Optimization**, *Organizer*: Hasnaa Zidani, session 233			**Control**
	Damien Allonsius, 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	

Room	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**, *Organizer*: Ion Necoara, session 323			**Learning**
	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	
FABRE Build J, Z 8 Ground Floor 3x30 min	**Advances in large-scale machine learning**, *Organizer*: Mark Schmidt, session 327			**Learning**
	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	
Salle 22 Build G, Z 6 2nd floor 2x30 min	**Learning for mixed integer optimization**, *Chair*: Hari Bandi, session 482			**Learning**
	Hari Bandi, Learning a Mixture of Gaussians via Mixed Integer Optimization	Takanori Maehara, Learning for Tuning Parameters of NUOPT MILP Solver		
PITRES Build O, Z 8 Ground Floor 3x30 min	**Pricing Methods**, *Organizer*: Rafael Martinelli, session 182			**Logistics**
	Teobaldo Bulhões Júnior, A branch-and-price algorithm for the Minimum Latency Problem	Jacques Desrosiers, Pricing, cycles, and pivots	Ruslan Sadykov, Branch-Cut-and-Price Solver for Vehicle Routing Problems	
Salle 23 Build G, Z 6 3rd floor 3x30 min	**Supply Chain and Lot Sizing**, *Chair*: Simon Thevenin, session 534			**Scheduling**
	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	
Salle DENUCE Build Q, Z 8 Ground Floor 3x30 min	**Equilibrium Modelling in Energy**, *Organizer*: Thomas Kallabis, session 290			**Energy**
	Mirjam Ambrosius, 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	
Salle 24 Build G, Z 6 3rd floor 3x30 min	**Optimization Models for Renewable Energy Integration 2**, *Chair*: Michel Denault, session 523			**Energy**
	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	
Salle LA4 Build L, Z 8 Basement 3x30 min	**Optimization in Medicine**, *Organizer*: Sebastian Sager, session 394			**Sciences**
	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	
Salle 18 Build I, Z 7 1st floor 3x30 min	**Optimization software and applications**, *Chair*: Bartolomeo Stellato, session 399			**Algo**
	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	

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			**IPtheory**
	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 subdeterminants	Robert Weismantel, Distances between LPs, IPs and MIPs
Salle 35 Build B, Z 4 Intermediate 4x30 min	**Advances in Integer Programming**, *Organizer*: Santanu S Dey, session 230			**IPtheory**
	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
Salle 42 Build C, Z 1 3rd floor 4x30 min	**Primal Algorithms for Integer Programming Problems**, *Organizer*: Daniel Aloise, session 338			**IPtheory**
	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
Salle 44 Build C, Z 1 3rd floor 4x30 min	**Benders Decomposition for Combinatorial and Bilevel Optimization**, *Organizer*: Fabio Furini, session 171			**IPpractice**
	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
Salle 34 Build B, Z 3 1st floor 3x30 min	**MINLP (I)**, *Organizer*: Daniel Bienstock, session 65			**MINLP**
		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
LEYTEIRE Build E, Z 1 3rd floor 4x30 min	**Approximation Algorithms for the Traveling Salesman Problem**, *Organizer*: Anke van Zuylen, session 23			**APPROX**
	Stephan Held, Vehicle Routing with Subtours	Kent Quanrud, Fast Approximations for Metric TSP	Jens Vygen, The s-t-path TSP: past, present, and future	Anke van Zuylen, The Salesman's Paths: Layered Christofides' Trees, Deletion and Matroids
Salle 36 Build B, Z 4 Intermediate 4x30 min	**Approximation Algorithms for Scheduling Problems**, *Organizer*: Nicole Megow, session 72			**APPROX**
	Ruben Hoeksma, 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
Salle 41 Build C, Z 1 3rd floor 4x30 min	**Discrete Convex Analysis**, *Organizer*: Akiyoshi Shioura, session 243			**COMB**
	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
Salle 39 Build E, Z 1 3rd floor 4x30 min	**Optimization under uncertainty**, *Organizer*: Marco Molinaro, session 261			**COMB**
	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
DURKHEIM Build A, Z 1 3rd floor 4x30 min	**Learning in CP**, *Organizer*: Arnaud Lallouet, session 301			**CP**
	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

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			**Stoch**
	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
Salle 32 Build B, Z 5 Ground Floor 3x30 min	**Sampling and stability in stochastic optimization**, *Chair*: Harsha Honnappa, session 488			**Stoch**
		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
Salle 37 Build B, Z 4 Intermediate 4x30 min	**Interfaces of Applied Probability and Optimization**, *Organizer*: Omar El Housni, session 409			**Robust**
	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
Salle 33 Build B, Z 5 Ground Floor 4x30 min	**Robust combinatorial optimization IV**, *Chair*: Arie Koster, session 449			**Robust**
	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
Salle 30 Build B, Z 5 Ground Floor 4x30 min	**Risk and Financial Markets**, *Chair*: Markku J Kallio, session 377			**Game**
	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

Room	Continuous Optimization - Wednesday 8:30 AM – 10:30 AM			
GINTRAC Build Q, Z 8 Ground Floor 4x30 min	**Stochastic and Nonlinear Optimization III**, *Organizer*: Jorge Nocedal, session 31			**NLP**
	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			**NLP**
	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			**NLP**
	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			**NLP**
	Konrawut Khammahawong, Convergence analysis of S-iteration process for discontinuous operators	Poom Kumam, A new lgorithms for split feasibility problems involving paramonotone equilibria	Khanitin 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			**NonSmooth**
	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			**NonSmooth**
	Radu Ioan Boţ, 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			**SDP**
	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			**SDP**
	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			**SDP**
	Claudia Adams, An L^2-approach to Coposition	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			**Variat**
			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			**Variat**
	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			**RandomM**
	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			**DerFree**
	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**, *Organizer*: 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**, *Organizer*: Lin Xiao, session 330			**Learning**
	Donald Goldfarb, Training neural networks using ADMM for multiaffine constrai	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**, *Organizer*: 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**, *Organizer*: 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**, *Organizer*: 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**, *Chair*: 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**, *Organizer*: 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**, *Organizer*: 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**, *Organizer*: 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	**Stochastic optimization**, *Chair*: Alexei A. Gaivoronski, session 314			**INTERFACE**
Build C, Z 2 2nd floor 4x30 min	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 Symph H, Z 0 Gambetta 1x60 min	**Insights via volumetric comparison of polyhedral relaxations**, *Organizer*: Andrea Lodi, session 548 Jon Lee, Insights via volumetric comparison of polyhedral relaxations			**SEMI**
BROCA Build W, Z 0 3rd floor 1x60 min	**Monotone Operator Theory in Convex Optimization**, *Organizer*: Samir Adly, session 537 Patrick Combettes, Monotone Operator Theory in Convex Optimization			**KEYNOTE**
DENIGES Build C, Z 5 Ground Floor 1x60 min	**Online Competitive Algorithms for Resource Allocation**, *Organizer*: Frank E. Curtis, session 539 Maryam Fazel, Online Competitive Algorithms for Resource Allocation			**KEYNOTE**
LEYTEIRE Build E, Z 1 3rd floor 1x60 min	**Model-Based Methods, Sampling Models, and A New Second-Order Model-Based Method**, *Organizer*: Stefan M Wild, session 546 Luis Nunes Vicente, Model-Based Methods, Sampling Models, and A New Second-Order Model-Based Method			**KEYNOTE**

Room	Invited Talks - Wednesday 1:30 PM – 2:30 PM			
Auditorium Build Symph H, Z 0 Gambetta 1x60 min	**Relaxations and Approximations of Chance Constraints**, *Organizer*: Simge Kucukyavuz, session 525 Shabbir Ahmed, Relaxations and Approximations of Chance Constraints			PLENARY

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			**IPpractice**
	Ashwin Arulselvan, Algorithms for bilevel knapsack problem	Orlando Rivera-Letelier, Cutting Planes for the Multi-Modal Precedence Constrained Problem	Enrico Malaguti, The Fractional Knapsack Problem with Penalties	
Salle 36 Build B, Z 4 Intermediate 3x30 min	**Decomposition I**, *Chair*: Dieter Weninger, session 486			**IPpractice**
	Kerem Bulbul, Benders Decomposition and Column-and-Row Generation for LPs w/Column-Dependent Rows	Paul Stursberg, Improved Cut Selection for Benders Decomposition	Dieter Weninger, A Penalty Alternating Direction Decomposition Framework for MIPs	
DURKHEIM Build A, Z 1 3rd floor 3x30 min	**Decomposition methods for MINLP**, *Organizer*: Ivo Nowak, session 55			**MINLP**
	Ivo Nowak, Decomposition-based Successive Approximation Methods for MINLP	Pavlo Muts, Decogo - A new decomposition-based MINLP solver	Eligius Hendrix, On simplicial monotonicity and dimension reduction in MINLP	
Salle 34 Build B, Z 3 1st floor 3x30 min	**MINLP (II)**, *Organizer*: Daniel Bienstock, session 66			**MINLP**
	Akshay Gupte, Polyhedral relaxations for nonconvex quadratic functions	Mohit Tawarmalani, Product convexification: A new relaxation framework for nonconvex programs	Javad Lavaei, Sparse conic optimization: low-rank solutions and near-linear time algorithms	
Salle 35 Build B, Z 4 Intermediate 3x30 min	**MINLP for Data Science**, *Organizer*: Vanesa Guerrero, session 108			**MINLP**
	Sandra Benítez-Peña, Cost-sensitive SVM	Cristina Molero-Río, Optimizing classification trees via non-linear continuous programming	Vanesa Guerrero, MINLP to visualize dynamic proximities and frequencies	
LEYTEIRE Build E, Z 1 3rd floor 3x30 min	**Clustering**, *Organizer*: Mohammad R Salavatipour, session 30			**APPROX**
	Aravindan Vijayaraghavan, Clustering Mixtures of Well-Separated Gaussians	Konstantin Makarychev, Correlation Clustering	Melanie Schmidt, Analysis of Ward's method	
Salle 43 Build C, Z 1 3rd floor 3x30 min	**Network Design and Routing**, *Chair*: Yuko Kuroki, session 346			**APPROX**
	Yusa Matsuda, A 4-approximation algorithm for k-prize collecting Steiner tree problems	Yuko Kuroki, Approximation algorithm for star-star hub-and-spoke network design problems	Jeremy Omer, Time-dependent shortest path with discounted waiting	
Salle 41 Build C, Z 1 3rd floor 3x30 min	**Variants of the Assignment problem**, *Organizer*: Kavitha Telikepalli, session 266			**COMB**
	Tobias Mömke, Approximating Airports and Railways	Ami Paz, A (2+eps)-Approximation for Maximum Weight Matching in the Semi-Streaming Model	Kavitha Telikepalli, Popularity, Mixed Matchings, and Self-duality	
Salle 39 Build E, Z 1 3rd floor 3x30 min	**Polyhedral aspects of combinatorial optimization problems**, *Chair*: Guillerme Duvillié, session 404			**COMB**
	Shungo Koichi, A polyhedral insight into covering a 2/3 supermodular function by a graph	Sergei Chubanov, Alternating contractions and their combinatorial applications	Guillerme Duvillié, Comparison of some symmetry breaking techniques for graph coloring problem	

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				**Stoch**
	Junyi Liu, Asymptotic Results For Two-stage Stochastic Quadratic Programming	Haoxiang Yang, Optimizing Crashing Decisions in a Project Management Problem with Disruptions	Matthias Poloczek, Bayesian Optimization of Combinatorial Structures		
DENIGES Build C, Z 5 Ground Floor 3x30 min	**Dynamic Optimization: Theory and Algorithms**, *Organizer*: Vineet Goyal, session 100				**Robust**
	Shimrit Shtern, A Scalable Algorithm for Two-Stage Adaptive Linear Optimization	Bradley Sturt, Data-Driven Multi-Stage Adaptive Optimization	Vineet Goyal, Optimal Approximation via Affine Policies for Two-stage Robust Optimization		
Salle 37 Build B, Z 4 Intermediate 3x30 min	**Cursing the Dimensionality: Two-Stage and Multi-Stage Robust Optimization**, *Organizer*: Angelos Tsoukalas, session 443				**Robust**
	Chin Pang Ho, Efficient Algorithms for Robust MDPs with State Rectangularity	Frans de Ruiter, Dual approach for two-stage robust nonlinear optimization models	Angelos Tsoukalas, Robust Dual Dynamic Programming		
Salle 31 Build B, Z 5 Ground Floor 2x30 min	**Dynamic programming applications**, *Chair*: Susanne Hoffmeister, session 379				**Markov**
	Susanne Hoffmeister, Markov Decision Processes for Sport Strategy Optimization	Paolo Serafini, A Model to evaluate the cost-effectiveness trade-off for urologic treatments			
Salle 30 Build B, Z 5 Ground Floor 3x30 min	**Nonconvex and Complex Problems in Multiobjective Optimization**, *Chair*: Gabriele Eichfelder, session 268				**Game**
	Gabriele Eichfelder, A Trust Region Method for Heterogeneous Multiobjective Optimization	Elizabeth Karas, Multiobjective programming via bundle methods	Tommaso Levato, Sparse multiobjective optimization via concave approximations		

Room	Continuous Optimization - Wednesday 3:15 PM – 4:45 PM			
GINTRAC Build Q, Z 8 Ground Floor 3x30 min	**The power and limits of the Lasserre hierarchy**, *Organizer*: Markus Schweighofer, session 9			**NLP**
	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	
Salle 05 Build Q, Z 11 1st floor 3x30 min	**Subspace methods in NLP I**, *Organizer*: Michal Kocvara, session 45			**NLP**
	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	
Salle 9 Build N, Z 12 4th floor 3x30 min	**Quadratic Optimization**, *Chair*: Anders Forsgren, session 417			**NLP**
	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	
Salle 8 Build N, Z 12 4th floor 3x30 min	**Adaptivity in non-smooth optimization**, *Organizer*: Volkan Cevher, session 187			**NonSmooth**
	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	
Salle 20 Build G, Z 6 1st floor 3x30 min	**SDP approaches to combinatorial and global optimization problems**, *Organizer*: Etienne De Klerk, session 15			**SDP**
	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	
Salle LC5 Build L, Z 10 Intermediate 1 3x30 min	**Reformulation-based solution methods for quadratic programming**, *Organizer*: Dominique Quadri, session 215			**SDP**
	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	
Salle 06 Build Q, Z 11 1st floor 3x30 min	**Optimization Algorithms and Variational Inequalities II**, *Organizer*: Xiaoqi Yang, session 150			**Variat**
	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/quasi-normality and directional enhanced KKT conditions	
Salle ARNOZAN Build Q, Z 8 Ground Floor 3x30 min	**Nash equilibrium and games 1**, *Organizer*: Lorenzo Lampariello, session 365			**Variat**
	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	
Salle KC6 Build K, Z 10 Intermediate 1 3x30 min	**Fast Converging Stochastic Optimization Algorithms**, *Organizer*: Francis Bach, session 213			**RandomM**
	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	
Salle 21 Build G, Z 6 Intermediate 3x30 min	**Surrogate-based algorithms for constrained derivative-free problems**, *Chair*: Phillipe R. Sampaio, session 126			**DerFree**
	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	
Salle AURIAC Build G, Z 6 1st floor 3x30 min	**Risk-Averse PDE-Constrained Optimization–Methods and Applications**, *Organizer*: Harbir Antil, session 222			**Control**
	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	

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**, *Chair*: Julien Mairal, session 474			**Learning**
	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	
FABRE Build J, Z 8 Ground Floor 3x30 min	**Convex optimization, distances and constraints**, *Chair*: Pablo A Parrilo, session 476			**Learning**
	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	
Salle 16 Build I, Z 7 2nd floor 3x30 min	**Rail and Maritime Transportation**, *Chair*: Kazuhiro Kobayashi, session 454			**Logistics**
	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	
Salle 18 Build I, Z 7 1st floor 3x30 min	**Scheduling in Networks**, *Chair*: Hamish Waterer, session 532			**Scheduling**
	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	
Salle 23 Build G, Z 6 3rd floor 3x30 min	**Conic Optimization and Power Systems**, *Organizer*: Jakub Marecek, session 68			**Energy**
	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	
Salle 24 Build G, Z 6 3rd floor 2x30 min	**Emerging Energy Markets**, *Organizer*: Dennice F. Gayme, session 291			**Energy**
	Maryam Kamgarpour, Designing coalition-proof mechanisms - the case of electricity markets	Sean Meyn, Irrational Agents and the Power Grid		
Salle LA4 Build L, Z 8 Basement 3x30 min	**Air Transportation and Air Traffic Management**, *Organizer*: Sonia Cafieri, session 315			**Sciences**
	Ahmed Khassiba, 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	
PITRES Build O, Z 8 Ground Floor 3x30 min	**Progress in Conic and MIP Solvers**, *Organizer*: Imre Polik, session 237			**Algo**
	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	
Salle 22 Build G, Z 6 2nd floor 3x30 min	**Structure Detection in Integer Programming**, *Organizer*: Taghi Khaniyev, session 272			**Algo**
	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	

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

Room	Discrete Optimization & Integer Programming - Wednesday 5:00 PM – 6:30 PM			
Salle 43 Build C, Z 1 3rd floor 2x30 min	**IP-Formulations**, *Chair*: Temitayo Ajayi, session 516			**IPtheory**
	Wolfgang Riedl, The quadratic assignment problem: a comparison of two linearizations	Temitayo Ajayi, Assessing Parametrized Linear Programming Relaxations With Superadditive Duality		
Salle 44 Build C, Z 1 3rd floor 3x30 min	**Exact Approaches for Vehicle Routing and Variants**, *Organizer*: Ricardo Fukasawa, session 288			**IPpractice**
	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	
DURKHEIM Build A, Z 1 3rd floor 3x30 min	**MINLP (III)**, *Organizer*: Daniel Bienstock, session 67			**MINLP**
	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	
Salle 34 Build B, Z 3 1st floor 3x30 min	**Robust Approaches for Challenging Uncertain Optimization Problems**, *Organizer*: Frauke Liers, session 124			**MINLP**
	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	
Salle 35 Build B, Z 4 Intermediate 3x30 min	**Advances in MINLP**, *Organizer*: Laura Palagi, session 165			**MINLP**
	Marianna De Santis, An Active Set Algorithm for Robust Combinatorial Optimization	Veronica Piccialli, Membrane System Design Optimization	Emiliano Traversi, Dantzig Wolfe Decomposition for Binary Quadratic Programming	
LEYTEIRE Build E, Z 1 3rd floor 3x30 min	**Approximation Algorithms for Geometric Packing Problems**, *Organizer*: Fabrizio Grandoni, session 28			**APPROX**
	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	
Salle 36 Build B, Z 4 Intermediate 3x30 min	**Online Optimization**, *Organizer*: Kevin Schewior, session 35			**APPROX**
	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	
Salle 41 Build C, Z 1 3rd floor 4x20 min	**Connectivity problems and Steiner trees**, *Chair*: Andreas E Feldmann, session 421			**COMB**
	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
Salle 39 Build E, Z 1 3rd floor 4x20 min	**Shortest paths and cutting stock**, *Chair*: Arnaud Vandaele, session 426			**COMB**
	Pedro de las Casas, Cost Projection Methods for the Shortest Path Problem with Crossing Costs	Adam Schienle, 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

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**, *Organizer*: Miguel Lejeune, session 248 **Stoch**			
	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	
Salle 32 Build B, Z 5 Ground Floor 4x20 min	**Stochastic optimization models and applications**, *Chair*: F.-Javier Heredia, session 495 **Stoch**			
	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
Salle 37 Build B, Z 4 Intermediate 2x30 min	**Robust Adaptive Control and Learning**, *Organizer*: Siqian Shen, session 97 **Robust**			
	Siqian Shen, Distributionally Robust Adaptive Control under Nonstationary Uncertainty	Lauren Steimle, Leveraging stochastic programming to design robust policies for Markov decision		
Salle 33 Build B, Z 5 Ground Floor 4x20 min	**Robust combinatorial optimization III**, *Organizer*: Moritz Mühlenthaler, session 255 **Robust**			
	Moritz Mühlenthaler, Robust Matching Augmentation	Viktor Bindewald, Solving Bulk-Robust Assignment Problems to Optimality	Felix Hommelsheim, Assignment Problems with few Failure Resources	Jaehyeon Ryu, Distributionally Robust Chance-Constrained Binary Knapsack Problem
Salle 30 Build B, Z 5 Ground Floor 3x30 min	**Aspects of Multiobjective Combinatorial Optimization**, *Organizer*: Matthias Ehrgott, session 87 **Game**			
	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	

Room	Continuous Optimization - Wednesday 5:00 PM – 6:30 PM			
GINTRAC Build Q, Z 8 Ground Floor 3x30 min	**Software for Nonlinear Optimization**, *Organizer*: Sven Leyffer, session 133			**NLP**
	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	
Salle 05 Build Q, Z 11 1st floor 3x30 min	**Conjugate Gradient Methods**, *Chair*: Giovanni Fasano, session 362			**NLP**
	Mehiddin Al-Baali, A New Diagonalizable Conjugate Gradient Method for Unconstrained Optimization	Giovanni Fasano, Conjugate Direction Methods and Polarity for Quadratic Hypersurfaces	Luis Lucambio Perez, Non-linear conjugate gradient for vector optimization on Riemannian manifolds	
Salle 9 Build N, Z 12 4th floor 3x30 min	**Linear Optimization II**, *Chair*: Julian Hall, session 416			**NLP**
	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	
Salle ARNOZAN Build Q, Z 8 Ground Floor 3x30 min	**Interior Point Methods in LP and NLP**, *Chair*: Andre L Tits, session 430			**NLP**
	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	
Salle 8 Build N, Z 12 4th floor 3x30 min	**Methods and Analysis for Nonsmooth Optimization**, *Organizer*: Michael L Overton, session 86			**NonSmooth**
	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	
Salle 20 Build G, Z 6 1st floor 3x30 min	**Noncommutative polynomial optimization: semidefinite relaxations, free convexity and applications to quantum information I**, *Organizer*: Monique Laurent, session 20			**SDP**
	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 noncommutative GNS construction is robust	
Salle LC5 Build L, Z 10 Intermediate 1 4x20 min	**Completely Positive Cones and Applications**, *Chair*: Patrick Groetzner, session 464			**SDP**
	Muhammad Iqbal, Approximation Hierarchies for Copositive and Completely Positive Tensor Cones	Mina Saee 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
Salle 06 Build Q, Z 11 1st floor 3x30 min	**Complementarity Problems**, *Organizer*: Samir K. Neogy, session 173			**Variat**
	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	
Salle KC6 Build K, Z 10 Intermediate 1 4x20 min	**Non-Convex and Second-order Methods in Machine Learning**, *Organizer*: Martin Takac, session 33			**RandomM**
	Aurelien Lucchi, Escaping Saddles with Stochastic Algorithms	Reza Babanezhad, Convergence Rate of Expectation-Maximization	Francesco Orabona, Parameter-free non-smooth convex stochastic optimization through coin betting	Martin Takac, SGD and Hogwild! Convergence Without the Bounded Gradients Assumption
Salle 21 Build G, Z 6 Intermediate 3x30 min	**Progress in methods and theory of derivative-free optimization**, *Chair*: Serge Gratton, session 42			**DerFree**
	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	
Salle AURIAC Build G, Z 6 1st floor 4x20 min	**Advances in optimization methods for time dependent problems II**, *Organizer*: Denis Ridzal, session 225			**Control**
	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

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**, *Chair*: Ross M Anderson, session 328			**Learning**
	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	
Salle 22 Build G, Z 6 2nd floor 2x20 min	**Large-scale convex optimization**, *Chair*: Alexander V. Rogozin, session 479			**Learning**
	Alexander Rogozin, Optimal distributed convex optimization on slowly time-varying graphs	Tommaso Colombo, Leverage data structure to improve Stochastic Gradient Descent algorithm		
Salle 24 Build G, Z 6 3rd floor 4x20 min	**Location and Routing**, *Chair*: Mustapha Oudani, session 451			**Logistics**
	Imen Ben Mohamed, Stochastic Two-echelon Location-Routing	Rasul Esmaeilbeigi, 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
Salle 16 Build I, Z 7 2nd floor 3x20 min	**Production-Routing**, *Chair*: Feng Gao, session 456			**Logistics**
	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	
Salle 18 Build I, Z 7 1st floor 3x20 min	**Machine Scheduling 2**, *Chair*: Guopeng Song, session 529			**Scheduling**
	Cristiane Ferreira, Human-Robot Scheduling in Collaborative Environments	Margaux Nattaf, Parallel machine scheduling with time constraints on machine qualifications	Guopeng Song, The robust machine availability problem	
Salle DENUCE Build Q, Z 8 Ground Floor 4x20 min	**Optimization and modeling of integrated energy systems**, *Organizer*: Jalal Kazempour, session 71			**Energy**
	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
Salle 23 Build G, Z 6 3rd floor 3x30 min	**Energy Market Models**, *Chair*: Sauleh A Siddiqui, session 522			**Energy**
	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	
Salle LA4 Build L, Z 8 Basement 3x30 min	**Resource-constrained assignment and scheduling**, *Organizer*: Fabian Bastin, session 398			**Sciences**
	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	
PITRES Build O, Z 8 Ground Floor 3x30 min	**Progress in MIP Solvers II**, *Organizer*: Hans Mittelmann, session 234			**Algo**
	Andrea Tramontani, Benders Decomposition in IBM CPLEX	Michael Winkler, Gurobi 8.0 - What's new	Michael Perregaard, Recent Progress in the Xpress Solvers	

Room	Invited Talks - Wednesday 5:00 PM – 6:30 PM			
SIGALAS	**Solvers and softwares**, *Chair*: François Clautiaux, session 390			**INTERFACE**
Build C, Z 2 2nd floor 4x20 min	Julien Darlay, Solving packing, routing and scheduling problems using LocalSolver	Pawel 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

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** , *Organizer*: Sinai Robins, session 142			**IPtheory**
	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	Sinai Robins, Fourier transforms of polytopes, solid angle sums, and discrete volumes
Salle 35 Build B, Z 4 Intermediate 4x30 min	**Convexity and Polytopes**, *Chair*: David Warme, session 518			**IPtheory**
	Emiliano Lancini, Box-Total Dual Integrality and k-Edge-Connectivity	Tamon Stephen, On the Circuit Diameter Conjecture	Filipe Cabral, The role of extreme points for convex hull operations.	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**, *Organizer*: Sven Mallach, session 127			**IPpractice**
	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	Sven Mallach, Compact Linearization for Zero-One Quadratic Programs
LEYTEIRE Build E, Z 1 3rd floor 4x30 min	**Submodular Maximization**, *Organizer*: Moran Feldman, session 29			**APPROX**
	Moran Feldman, Deterministic and Combinatorial Algorithms for Submodular Maximization	Baruch Schieber, Constrained Submodular Maximization via Greedy Local Search	Simon Bruggmann, Submodular Maximization through the Lens of Linear Programming	Niv Buchbinder, Constrained Submodular Maximization via a Non-symmetric Technique
Salle 43 Build C, Z 1 3rd floor 4x30 min	**Cycles and Trees**, *Organizer*: Tobias Mömke, session 90			**APPROX**
	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	Ralf Klasing, Approximabilty of Hub Allocation Problems
Salle 36 Build B, Z 4 Intermediate 4x30 min	**Bin Packing**, *Chair*: Frits CR Spieksma, session 344			**APPROX**
	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	Frits Spieksma, Partitioning Vectors into Quadruples
Salle 41 Build C, Z 1 3rd floor 4x30 min	**Graphs and clutters**, *Organizer*: Gerard Cornuejols, session 263			**COMB**
	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	Dabeen Lee, Deltas, extended odd holes and their blockers
Salle 39 Build E, Z 1 3rd floor 4x30 min	**Graph theory**, *Chair*: Thomas Bellitto, session 422			**COMB**
	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	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**, *Organizer*: Bistra Dilkina, session 296			**CP**
	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	Ciaran McCreesh, Parallel Search, Ordering, Reproducibility, and Scalability
Salle 47 Build A, Z 1 3rd floor 4x30 min	**Performance Analysis**, *Organizer*: Charlotte Truchet, session 298			**CP**
	Lars Kotthoff, The Shapley Value and the Temporal Shapley Value for Algorithm Analysis	Guilhem Semerjian, Phase transitions in random constraint satisfaction problems	Charlotte Truchet, A probabilistic study of the propagation of the AllDifferent constraint	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**, *Chair*: Bismark Singh, session 489			**Stoch**
	Abebe Geletu, Smoothing Methods for Chance Constrained Optimization of Elliptic PDE Systems	René Henrion, Dynamic chance constraints under random distributiond	Armin Hoffmann, Differentiabilty of joint chance constraints under weakened LICQ	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**, *Organizer*: Jim Luedtke, session 490			**Stoch**
	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	Jim Luedtke, Lagrangian dual decision rules for multistage stochastic integer programs
Salle 37 Build B, Z 4 Intermediate 4x30 min	**K-adaptability**, *Organizer*: Anirudh Subramanyam, session 1			**Robust**
	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-Adaptibility in Stochastic Programming	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**, *Chair*: Mirjam Duer, session 461			**Robust**
		Jorge Vera, Condition and geometric measures for consistency in intertemporal optimization	Alec Koppel, Compositional Stochastic Optimization with Kernels for Robust Online Learning	Mirjam Duer, Robust Approach for Stratified Sampling Allocation Problems
Salle 30 Build B, Z 5 Ground Floor 4x30 min	**Stackelberg Games**, *Chair*: Stefano Coniglio, session 374			**Game**
	Jean-Bernard Eytard, Tropical geometry applied to bilevel programming	Stefan Waldherr, Bilevel Programming for Combinatorial Exchanges with Budget Constraints	Stefano Coniglio, Computing Pessimistic Leader-Follower Equilibria with Multiple Followers	Francesco Caruso, A learning approach for selection of subgame perfect Nash equilibria

Room	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**, *Organizer*: Immanuel M. Bomze, session 3			**NLP**
	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**, *Organizer*: Michael Todd, session 77			**NLP**
	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**, *Organizer*: Coralia Cartis, session 176			**NLP**
	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**, *Chair*: Sandra A. Santos, session 436			**NLP**
	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**, *Organizer*: Alexander Gasnikov, session 53			**NonSmooth**
	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**, *Organizer*: Wotao Yin, session 183			**NonSmooth**
	Mila Nikolova, Alternating structure-adapted proximal gradient descent for nonconvex 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 lage scale poblems**, *Organizer*: Yu Du, session 556			**NonSmooth**
	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 method	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**, *Organizer*: Adrien Taylor, session 19			**SDP**
	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**, *Organizer*: Javier F Pena, session 160			**SDP**
	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**, *Organizer*: Xin Liu, session 140			**Variat**
	Yaxiang Yuan, Theory and Applicaiton 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**, *Organizer*: Shiqian Ma, session 202			**RandomM**
	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**, *Chair*: Stefan M Wild, session 39			**DerFree**
	Mickael Binois, Improving Bayesian optimization via random embeddings	Saul Toscano-Palmerin, Bayesian Optimization of Expensive Integrands	Clément Royer, Using Models in Allocate 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**, *Chair*: Alexandre Vieira, session 336			**Control**
	Alexandre Vieira, Optimal control of Linear Complementarity Systems	Anne-Therese Rauls, Computing a Subgradient for the Solution Operator of the Obstacle Problem	Ailyn Stötzner, Optimal Control of Thermoviscoplasticity	Anna Walter, Optimal Control of Elasto-plasticity 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**, *Organizer*: Stephen A Vavasis, session 316			**Learning**
	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	Yaoliang Yu, Bregman Divergence for Stochastic Variance Reduction
Salle DENUCE Build Q, Z 8 Ground Floor 4x30 min	**Large-scale learning**, *Organizer*: Lorenzo Rosasco, session 335			**Learning**
	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
Salle 16 Build I, Z 7 2nd floor 4x30 min	**Dynamical systems, control and optimization**, *Chair*: Benjamin Recht, session 470			**Learning**
	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
Salle LA4 Build L, Z 8 Basement 4x30 min	**Multi-commodity flows**, *Organizer*: Ralf Borndörfer, session 358			**Network**
	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
PITRES Build O, Z 8 Ground Floor 3x30 min	**Vehicle Routing I**, *Chair*: Guy Desaulniers, session 411			**Logistics**
		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
Salle 23 Build G, Z 6 3rd floor 4x30 min	**Unit Commitment Problem and Applications**, *Organizer*: Tiziano Parriani, session 94			**Energy**
	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
Salle 24 Build G, Z 6 3rd floor 4x30 min	**Mining Applications**, *Organizer*: Alexandra M Newman, session 172			**Energy**
	Marcos Goycoolea, Lane's Algorithm Revisisted	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
Salle 22 Build G, Z 6 2nd floor 4x30 min	**Numerically Efficient Methods for Piecewise Algorithmic Differentiation II**, *Organizer*: Torsten F Bosse, session 270			**Algo**
	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
Salle 18 Build I, Z 7 1st floor 3x30 min	**High-Performance Computing in Optimization I**, *Organizer*: Kibaek Kim, session 271			**Algo**
		Ted Ralphs, Performance Assessment for Parallel MILP Solvers	Yuji Shinano, Ubiquity Generator Framework to parallelize state-of-the-art B and B based solvers	Kibaek Kim, Branching Strategies on Decomposition Methods for Mixed-Integer Programming

Room	Invited Talks - Thursday 8:30 AM – 10:30 AM			
SIGALAS	**Energy**, *Chair*: Kazem Abbaszadeh, session 387			**INTERFACE**
Build C, Z 2 2nd floor 4x30 min	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

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

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

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			**IPtheory**
	Tri-Dung Nguyen, Algebraic Geometry and Integer Programmings 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	
Salle 43 Build C, Z 1 3rd floor 3x30 min	**Polynomial Time Solvable Problems and Complete Descriptions**, *Chair*: Andreas Bärmann, session 520			**IPtheory**
	A-E Falq, Extreme points for scheduling around a common due date	Lars Rohwedder, On Integer Programming and Convolution	Andreas Bärmann, The Clique Problem with Multiple-Choice Constraints and Two Polynomial Subcases	
Salle 44 Build C, Z 1 3rd floor 3x30 min	**Computational Issues in Integer Programming**, *Organizer*: Ricardo Fukasawa, session 289			**IPpractice**
	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	
Salle 39 Build E, Z 1 3rd floor 3x30 min	**Convexification and more (I)**, *Organizer*: Jon Lee, session 62			**MINLP**
	Marcia Fampa, Treating indefinite quadratic and bilinear forms in MINLP	Amélie Lambert, Valid inequalities for QCQPs	Luze Xu, More Virtuous Smoothing	
Salle 34 Build B, Z 3 1st floor 3x30 min	**Heuristics in MINLP**, *Chair*: Bertrand Travacca, session 276			**MINLP**
	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	
Salle 35 Build B, Z 4 Intermediate 3x30 min	**MINLP with quadratic terms**, *Chair*: Enrico Bettiol, session 282			**MINLP**
	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	
LEYTEIRE Build E, Z 1 3rd floor 3x30 min	**Approximation Algorithms for Clustering.**, *Organizer*: Deeparnab Chakrabarty, session 32			**APPROX**
	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	
Salle 36 Build B, Z 4 Intermediate 3x30 min	**Routing and Inventory**, *Organizer*: Dorit Hochbaum, session 343			**APPROX**
	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	
SIGALAS Build C, Z 2 2nd floor 3x30 min	**Algorithms for TSP**, *Organizer*: Ola Svensson, session 239			**COMB**
	Vera Traub, Approaching 3/2 for the s-t-path TSP	Ramamoorthi Ravi, Cut-Covering Decompositions for Connectivity Problems	Ola Svensson, A Constant-factor Approximation Algorithm for the Asymmetric Traveling Salesman	
DURKHEIM Build A, Z 1 3rd floor 3x30 min	**Applications of CP**, *Organizer*: Louis-Martin Rousseau, session 284			**CP**
	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	

Room	Optimization under Uncertainty - Thursday 3:15 PM – 4:45 PM			
Salle 32	**Theoreticals and practicals aspects of decomposition algorithms for multistage stochastic problems: 1**, *Organizer*: Vincent Leclère, session 246			**Stoch**
Build B, Z 5 Ground Floor 3x30 min	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	
DENIGES	**Distributionally Robust Optimization With Marginals and Cones**, *Organizer*: Divya Padmanabhan, session 354			**Robust**
Build C, Z 5 Ground Floor 3x30 min	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	
Salle 37	**Non-linear robust optimization**, *Chair*: Laurent Alfandari, session 460			**Robust**
Build B, Z 4 Intermediate 3x30 min	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	
Salle 30	**Generation and Representation Algorithms in Multiobjective Optimization**, *Organizer*: Michael Stiglmayr, session 267			**Game**
Build B, Z 5 Ground Floor 3x30 min	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	

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**, *Organizer*: Orizon P Ferreira, session 21			**NLP**
	Paulo Oliveira, A two-phase proximal-like algorithm in domains of positivity	Glaydston Bento, Proximal point method in multiobjective optimization on Hadamard manifolds	Orizon Ferreira, Newton's Method for Locally Lipschitz vector Fields on Riemannian Manifolds	
Salle 8 Build N, Z 12 4th floor 3x30 min	**Extending the Reach of First-Order Methods, Part II**, *Organizer*: Robert M. Freund, session 286			**NonSmooth**
	Matus Telgarsky, Risk and parameter convergence of logistic regression	Alp Yurtsever, A conditional gradient framework for composite convex minimization	Robert Freund, Accelerating Greedy Coordinate Descent Methods	
Salle LC5 Build L, Z 10 Intermediate 1 3x30 min	**Noncommutative polynomial optimization: semidefinite relaxations, free convexity and applications to quantum information II**, *Organizer*: Monique Laurent, session 18			**SDP**
	Sander Gribling, Quantifying entanglement of a quantum correlation using polynomial optimization	Antonios Varvitsiotis, Graph isomorphism: conic relaxations and physical interpretation	Farid Alizadeh, Optimization over univariate polynomials: Algorithms and applications	
Salle 06 Build Q, Z 11 1st floor 3x30 min	**Nonlinear Optimization and Variational Inequalities II**, *Organizer*: Cong Sun, session 141			**Variat**
	Xin Liu, On the Lojasiewicz Exponent of Quadratic Minimization with Sphere Constraint	Bin Gao, A Parallelizable Algorithm for Orthogonally Constrained Optimization Problems	Yanfei Wang, A Joint Matrix Minimization Approach for Seismic Wavefield Recovery	
Salle KC6 Build K, Z 10 Intermediate 1 3x30 min	**Asynchronous Parallel and Distributed Optimization**, *Organizer*: Wotao Yin, session 200			**RandomM**
	Rémi Leblond, Improved asynchronous parallel optimization analysis for incremental methods	Robert Hannah, Why Asynchronous Algorithms may Drastically Outperform Traditional Ones	Renato Monteiro, Complexity of a quadratic penalty accelerated inexact proximal point method	
Salle AURIAC Build G, Z 6 1st floor 2x30 min	**Theory and Methods for ODE- and PDE-Constrained Optimization 2**, *Chair*: Johann Schmitt, session 333			**Control**
	Johann Schmitt, Optimal boundary control of hyperbolic balance laws with state constraints	Paloma Schäfer Aguilar, Numerical approximation of optimal control problems for conservation laws		

Room	Specific Models, Algorithms, and Software - Thursday 3:15 PM – 4:45 PM			
FABRE Build J, Z 8 Ground Floor 3x30 min	**Accelerating Learning**, *Organizer*: Martin Takac, session 322			**Learning**
	Damien Scieur, Nonlinear Acceleration of Stochastic Algorithms	Sai Praneeth Karimireddy, Accelerated First Order Methods with Approximate Subproblems	Angelia Nedich, Optimal Algorithms for Distributed Optimization	
Salle 16 Build I, Z 7 2nd floor 3x30 min	**Robust first order methods**, *Organizer*: Fatma Kilinc-Karzan, session 332			**Learning**
	Dimitris Papailiopoulos, Robust distributed learning in the face of adversity	Suriya Gunasekar, Characterizing implicit bias of optimization and its role in generalization	Nam Ho-Nguyen, First-order Framework for Robust Convex Optimization	
PITRES Build O, Z 8 Ground Floor 2x30 min	**Path Problems**, *Chair*: Yanchao Liu, session 453			**Logistics**
	Edward He, Dynamic Discretization Discovery Algorithms for Time-Dependent Path Problems	Yanchao Liu, Drone Path Planning and Aerial Traffic Flow		
Salle 18 Build I, Z 7 1st floor 3x30 min	**Production Planning**, *Chair*: Michel Siemon, session 531			**Scheduling**
	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	Michel Siemon, Value-based End-to-End Production Planning in Non-Ferrous Metal Industry	
Salle DENUCE Build Q, Z 8 Ground Floor 3x30 min	**Optimization Models for Renewable Energy Integration 1**, *Organizer*: Luis F Zuluaga, session 120			**Energy**
	Panagiotis Andrianesis, Optimal Grid Operation and DER Dispatch in Active Distribution Networks	Galina Orlinskaya, Bilevel Optimization for Flexible Electricity Supply Tariff Design	Luis Zuluaga, Competitive equilibrium and revenue adequate prices for robust energy markets	
Salle 23 Build G, Z 6 3rd floor 3x30 min	**Progress in Algorithms for Optimal Power Flow Problems II**, *Chair*: Miguel F Anjos, session 509			**Energy**
	Alvaro Lorca, Robust Optimization for the Alternating Current Optimal Power Flow Problem	Ksenia Bestuzheva, Global Optimization for Alternating Current Optimal Power Flow	Andreas Grothey, Optimal Power Flow solver based on HELM	
Salle 24 Build G, Z 6 3rd floor 3x30 min	**Electricity Generation Scheduling and Dispatch**, *Chair*: Christophe Duhamel, session 511			**Energy**
	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	Christophe Duhamel, solving the Short-term Hydrothermal Scheduling problem with linearizations	
Salle LA4 Build L, Z 8 Basement 3x30 min	**Inverse Problems in Physics**, *Chair*: Leo Liberti, session 391			**Sciences**
	Andreas Alpers, On the reconstruction of lattices from diffraction data	Fabian Klemm, Grain map reconstruction by means of generalized Voronoi Diagrams	Leo Liberti, Scientific applications of distance geometry	
Salle 22 Build G, Z 6 2nd floor 3x30 min	**High-Performance Computing in Optimization II**, *Chair*: Joaquim Dias Garcia, session 466			**Algo**
	Timotej Hrga, High-Performance Solver for Binary Quadratic Problems	Brian Dandurand, Bilevel optimization approaches for power system security	Joaquim Dias Garcia, Genesys: Simulating Power Systems by Solving Millions of MIPs	

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**, *Organizer*: Robert Hildebrand, session 227			**IPtheory**
	Laura Sanità, 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
Salle 42 Build C, Z 1 3rd floor 3x30 min	**Cutting Planes for Special Problems**, *Chair*: Eleazar Madriz, session 517			**IPtheory**
	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.	
Salle 36 Build B, Z 4 Intermediate 4x20 min	**Matching Problems**, *Organizer*: Sergio García Quiles, session 175			**IPpractice**
	Thanh Nguyen, Stable Matching with Proportionality Constraints	Maxence Delorme, Mathematical models for stable marriage problems with ties	William Pettersson, Improvements in Kidney Exchange Programme Models for Large-Scale Programmes	Peter Biro, Stable project allocation under distributional constraints
Salle 44 Build C, Z 1 3rd floor 4x20 min	**Cutting Planes**, *Chair*: Fabrizio Marinelli, session 485			**IPpractice**
	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
DURKHEIM Build A, Z 1 3rd floor 3x30 min	**Convexification and more (II)**, *Organizer*: Akshay Gupte, session 106			**MINLP**
	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	
Salle 34 Build B, Z 3 1st floor 3x30 min	**Relaxations in MINLP**, *Chair*: Jan Kronqvist, session 280			**MINLP**
	Ralf Lenz, Tight Convex Relaxations for Expansion Planning of Potential Driven Networks	Jan Kronqvist, Using Regularization and Second Order Derivatives with Outer Approximation	Andreas Lundell, The Supporting Hyperplane Optimization Toolkit for Convex MINLP	
Salle 35 Build B, Z 4 Intermediate 3x30 min	**Applications in MINLP**, *Chair*: Justo Puerto, session 283			**MINLP**
	Do Duc Le, Modeling and optimization of traffic at traffic-light controlled intersections	Maximilian Merkert, Flow-based extended formulations for feasible traffic light controls	Justo Puerto, MINLP for pricing transaction costs in different models of portfolio selection	
LEYTEIRE Build E, Z 1 3rd floor 3x30 min	**Approximation Algorithms for Optimization under Uncertainty**, *Organizer*: Marc Uetz, session 95			**APPROX**
	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	
Salle 41 Build C, Z 1 3rd floor 3x30 min	**Approximation algorithms for combinatorial optimization problems**, *Organizer*: Thomas Rothvoss, session 265			**COMB**
	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	
Salle 39 Build E, Z 1 3rd floor 4x20 min	**Heuristics for combinatorial optimization problems**, *Chair*: Evren Guney, session 428			**COMB**
	Cid de Souza, A Matheuristic to the Firefighter 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

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**, *Organizer*: Vincent Leclère, session 247			**Stoch**
	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
Salle 30 Build B, Z 5 Ground Floor 3x20 min	**Topics in multistage stochastic optimization**, *Chair*: Felipe Beltrán, session 492			**Stoch**
	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	
DENIGES Build C, Z 5 Ground Floor 3x30 min	**Robust Optimization under Data Uncertainty**, *Organizer*: Omid Nohadani, session 98			**Robust**
	Matthias Ehrgott, Uncertain Data Envelopment Analysis	Soroosh Shafieezadeh, Wasserstein Distributionally Robust Kalman Filtering	Zhenzhen Yan, Appointment Scheduling Under Time-Dependent Patient No-Show Behavior	
Salle 37 Build B, Z 4 Intermediate 4x20 min	**Combinatorial robust optimization I**, *Organizer*: Marc Goerigk, session 167			**Robust**
	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
Salle 31 Build B, Z 5 Ground Floor 3x30 min	**Approximation in dynamic programming**, *Chair*: Philip C Placek, session 382			**Markov**
	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	

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				**NLP**
	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	
Salle KC7 Build K, Z 10 Intermediate 2 3x20 min	**First Order Methods II**, *Chair*: Guillaume Berger, session 437				**NLP**
	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		
Salle 20 Build G, Z 6 1st floor 4x20 min	**Global Optimization 3**, *Chair*: Jean-Baptist Hiriart-Urruty, session 503				**Global**
	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	Tiago Montanher, A rigorous 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				**NonSmooth**
	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		
Salle 8 Build N, Z 12 4th floor 3x30 min	**Different faces of nonsmoothness in optimization**, *Organizer*: Tim Hoheisel, session 212				**NonSmooth**
	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		
Salle AURIAC Build G, Z 6 1st floor 4x20 min	**Recent Advances in Conic Programming III**, *Organizer*: Masakazu Muramatsu, session 84				**SDP**
	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	
Salle LC5 Build L, Z 10 Intermediate 1 4x20 min	**Using coning programming in problems solving**, *Chair*: Kurt Majewski, session 497				**SDP**
	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	
Salle 06 Build Q, Z 11 1st floor 3x30 min	**VU-decomposition techniques for nonsmooth optimization**, *Organizer*: Claudia Sagastizabal, session 158				**Variat**
	Shuai Liu, An epsilon-VU algorithm with superlinear convergence	Claudia Sagastizabal, A derivative-free $\mathcal{VU}$-algorithm for convex finite-max problems	Lucas Simões, A Fast Gradient Sampling-like Method for Solving Nonsmooth Optimization Problems		
Salle ARNOZAN Build Q, Z 8 Ground Floor 4x20 min	**Variational Analysis 5**, *Organizer*: David Sossa, session 371				**Variat**
	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	
Salle KC6 Build K, Z 10 Intermediate 1 3x20 min	**Recent Progress on Second-order Type Optimization Methods**, *Organizer*: Andre Milzarek, session 302				**RandomM**
	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		
Salle 21 Build G, Z 6 Intermediate 3x30 min	**Advances in DFO III**, *Chair*: Juan C Meza, session 496				**DerFree**
	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		

Room	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**, *Organizer*: Stephen A Vavasis, session 318			**Learning**
	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
Salle 16 Build I, Z 7 2nd floor 4x20 min	**Advances in Reinforcement Learning Algorithms**, *Organizer*: Lin Xiao, session 329			**Learning**
	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
Salle 22 Build G, Z 6 2nd floor 4x20 min	**Ranking and recommendation**, *Chair*: Aleksandra Burashnikova, session 472			**Learning**
	Aleksandra Burashnikova, Learning Online Ranking Models with a Sequential Optimization Algorithm	Ibrahim Muter, Integrating Individual and Aggregate Diversity in Top-N Recommendation	Engin Tas, A stochastic gradient descent algorithm for learning to rank	Jose Dula, The Recommender Problem with Convex Hulls
Salle 24 Build G, Z 6 3rd floor 3x20 min	**Vehicle Routing III**, *Chair*: Raquel Bernardino, session 413			**Logistics**
	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	
Salle 18 Build I, Z 7 1st floor 4x20 min	**Supply Chain**, *Chair*: Daniel Ramón-Lumbierres, session 533			**Scheduling**
	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
Salle DENUCE Build Q, Z 8 Ground Floor 3x30 min	**Equilibrium and Optimization in Energy Markets**, *Organizer*: Asgeir Tomasgard, session 151			**Energy**
	Steven Gabriel, Bilevel Linear Programming Investment Problems Lower-Level Primal and Dual Variables	Endre Bjorndal, The Flow-Based Market Coupling Model and the Bidding Zone Configuration	Asgeir Tomasgard, A European power market model with short- and long-term uncertainty	
Salle 23 Build G, Z 6 3rd floor 3x30 min	**Gas Network and Market Optimization**, *Organizer*: Jonas Schweiger, session 293			**Energy**
	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	
Salle LA4 Build L, Z 8 Basement 4x20 min	**Medicine and Metabolic engineering**, *Chair*: Mahdi Doostmohammadi, session 396			**Sciences**
	Michelle Boeck, Model Predictive Control and Robust Optimization in Adaptive Radiation Therapy	Björn Morén, 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
Salle 9 Build N, Z 12 4th floor 4x20 min	**Large-scale combinatorial optimization implementations**, *Organizer*: Aaron Archer, session 96			**Algo**
	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
PITRES Build O, Z 8 Ground Floor 3x30 min	**Computational OR in Julia/JuMP**, *Organizer*: Miles Lubin, session 238			**Algo**
	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	

Room	Invited Talks - Thursday 5:00 PM – 6:30 PM			
SIGALAS	**Planning**, *Chair*: Jeanjean Antoine, session 389			**INTERFACE**
Build C, Z 2 2nd floor 4x20 min	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

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**, *Organizer*: Alberto Del Pia, session 218			**IPtheory**
	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
Salle 35 Build B, Z 4 Intermediate 4x30 min	**Mixed Integer Programming Representability**, *Organizer*: Juan Pablo Vielma, session 275			**IPtheory**
	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
Salle 44 Build C, Z 1 3rd floor 4x30 min	**Integer Programming and Crew Scheduling**, *Organizer*: Francois Soumis, session 292			**IPpractice**
	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
Salle 34 Build B, Z 3 1st floor 3x30 min	**Optimal Control Problems with Discrete Switches**, *Organizer*: Christian Kirches, session 102			**MINLP**
		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
LEYTEIRE Build E, Z 1 3rd floor 4x30 min	**Data-Driven Revenue Management with Customer Choice**, *Organizer*: Jacob Feldman, session 81			**APPROX**
	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 Exponomial Choice Model
Salle 36 Build B, Z 4 Intermediate 4x30 min	**Clustering.**, *Organizer*: Zac Friggstad, session 155			**APPROX**
	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
SIGALAS Build C, Z 2 2nd floor 4x30 min	**Matching and scheduling**, *Organizer*: Seffi Naor, session 54			**COMB**
	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
Salle 41 Build C, Z 1 3rd floor 4x30 min	**Recent progress in graph cut problems**, *Organizer*: Karthekeyan Chandrasekaran, session 244			**COMB**
	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
Salle 39 Build E, Z 1 3rd floor 4x30 min	**Algorithmic aspects of connectivity in network design**, *Organizer*: Neil Olver, session 264			**COMB**
	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	Kanstantsin Pashkovich, On the Integrality Gap of the Prize-Collecting Steiner Forest LP
DURKHEIM Build A, Z 1 3rd floor 4x30 min	**Graphical Optimization Model 2**, *Organizer*: Maria I. Restrepo, session 297			**CP**
	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

Room	Optimization under Uncertainty - Friday 8:30 AM – 10:30 AM			
DENIGES Build C, Z 5 Ground Floor 4x30 min	**Theoreticals and practicals aspects of decomposition algorithms for multistage stochastic problems: 3**, *Organizer*: Vincent Leclère, session 245			**Stoch**
	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
Salle 32 Build B, Z 5 Ground Floor 4x30 min	**New methods for stochastic optimization and variational inequalities**, *Chair*: Yunxiao Deng, session 491			**Stoch**
	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
Salle 33 Build B, Z 5 Ground Floor 3x30 min	**New Horizons in Robust Optimization**, *Organizer*: Angelos Georghiou, session 447			**Robust**
		Zhi Chen, Data-driven Chance Constrained Programs over Wasserstein Balls	Kilian Schindler, Cardinality-Constrained Clustering and Outlier Detection via Conic Optimization	Angelos Georghiou, A robust optimization prospective to decentralized decision making
Salle 31 Build B, Z 5 Ground Floor 4x30 min	**Advances in theory of dynamic programming**, *Chair*: Stephane L Gaubert, session 385			**Markov**
	Mauricio Junca, On controllability of Markov chains: A Markov Decision Processes approach	Angeliki Kamoutsi, Stochastic Convex Optimization and Regret Bounds for Apprenticeship Learning	Nabil Kahale, Randomized Dimension Reduction for Monte Carlo Simulations	Nikolas Stott, Dynamic programming over noncommutative spaces applied to switched systems
Salle 30 Build B, Z 5 Ground Floor 4x30 min	**Algorithmic Game Theory II**, *Chair*: Margarida Carvalho, session 372			**Game**
	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

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			**NLP**
	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
GINTRAC Build Q, Z 8 Ground Floor 4x30 min	**Stochastic and Nonlinear Optimization II**, *Organizer*: Jorge Nocedal, session 48			**NLP**
	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
Salle KC7 Build K, Z 10 Intermediate 2 4x30 min	**Regularization and Iterative Methods in Large-Scale Optimization**, *Organizer*: Jacek Gondzio, session 59			**NLP**
	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 Pougkakiotis, Dynamic primal-dual regularization in interior point methods	Michael Saunders, Stabilized Optimization via an NCL Algorithm
Salle 9 Build N, Z 12 4th floor 4x30 min	**Decomposition Methods**, *Chair*: Roger Behling, session 431			**NLP**
	Roger Behling, Circumcentering the Douglas–Rachford method	Luiz-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 Nonomonotone Decomposition Framework: convergence analysis and applications
Salle LC4 Build L, Z 9 Intermediate 1 4x30 min	**Geometry in complexity analysis of non-smooth optimization methods**, *Organizer*: Jalal Fadili, session 199			**NonSmooth**
	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
Salle 8 Build N, Z 12 4th floor 4x30 min	**Convergence analysis for non smooth optimization**, *Organizer*: Robert Csetnek, session 557			**NonSmooth**
	Robert Csetnek, ADMM for monotone operators: convergence analysis and rates	Mattias 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
Salle 20 Build G, Z 6 1st floor 4x30 min	**Copositive and completely positive optimization**, *Organizer*: Olga Kuryatnikova, session 24			**SDP**
	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
Salle LC5 Build L, Z 10 Intermediate 1 4x30 min	**Stability and scaling in conic programming**, *Chair*: Diego Cifuentes, session 498			**SDP**
	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
Salle 06 Build Q, Z 11 1st floor 4x30 min	**Stochastic Optimization and Variational Inequalites**, *Organizer*: Hailin Sun, session 149			**Variat**
	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
Salle ARNOZAN Build Q, Z 8 Ground Floor 4x30 min	**Variational Analysis 3**, *Organizer*: Johanna Burtscheidt, session 369			**Variat**
	Johanna Burtscheidt, 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
Salle KC6 Build K, Z 10 Intermediate 1 3x30 min	**Recent Advances in Coordinate Descent and Constrained Problems**, *Organizer*: Ion Necoara, session 208			**RandomM**
		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
Salle 21 Build G, Z 6 Intermediate 4x30 min	**Challenging applications in DFO**, *Chair*: Francesco Rinaldi, session 38			**DerFree**
	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
Salle AURIAC Build G, Z 6 1st floor 3x30 min	**Optimal Control in Engineering Applications**, *Chair*: Maxime Grangereau, session 310			**Control**
		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

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**
	Deepjyoti 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 Michel Balinski, Majority judgment				**KEYNOTE**
DENIGES Build C, Z 5 Ground Floor 1x60 min	**Submodularity in mixed-integer quadratic and conic quadratic optimization**, *Organizer*: Daniel Bienstock, session 540 Alper Atamturk, Submodularity in mixed-integer quadratic and conic quadratic optimization				**KEYNOTE**
BROCA Build W, Z 0 3rd floor 1x60 min	**Modern Branch-and-Cut Implementation**, *Organizer*: Marc E Pfetsch, session 542 Matteo Fischetti, Modern Branch-and-Cut Implementation				**KEYNOTE**

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**, PLENARY *Organizer*: Frank Vallentin, session 553 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			**IPtheory**
	Rafael Colares, The Stop Number Minimization Problem: polyhedral analysis	Francisco Barahona, On the nucleolus of shortest path and network disconnection games	Mourad Baiou, On some network security games	
Salle 42 Build C, Z 1 3rd floor 3x30 min	**Extended Formulations**, *Chair*: Bartosz Filipecki, session 514			**IPtheory**
	Bernd Perscheid, 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	
Salle 44 Build C, Z 1 3rd floor 3x30 min	**Routing**, *Chair*: Cole Smith, session 484			**IPpractice**
	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	
Salle 36 Build B, Z 4 Intermediate 3x30 min	**IP Practice III**, *Chair*: Samuel S Brito, session 507			**IPpractice**
	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	
Salle 39 Build E, Z 1 3rd floor 3x30 min	**Outer Convexification and Mixed-Integer Optimal Control** , *Organizer*: Sebastian Sager, session 103			**MINLP**
	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	
DURKHEIM Build A, Z 1 3rd floor 3x30 min	**Intersection cuts, disjunctions, and valid inequalities**, *Organizer*: Eli Towle, session 180			**MINLP**
	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	
Salle 35 Build B, Z 4 Intermediate 3x30 min	**Branch-and-cut techniques**, *Organizer*: Teodora Dan, session 277			**MINLP**
	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	
LEYTEIRE Build E, Z 1 3rd floor 3x30 min	**Submodular Maximization.**, *Organizer*: Justin Ward, session 179			**APPROX**
	Ilija 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	
Salle 43 Build C, Z 1 3rd floor 3x30 min	**Submodular and Incremental Maximization**, *Organizer*: Martin Gross, session 340			**APPROX**
	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	
SIGALAS Build C, Z 2 2nd floor 3x30 min	**Combinatorial aspects of Linear Programming**, *Organizer*: Daniel Dadush, session 259			**COMB**
	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	

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			**Stoch**
	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	
Salle 33 Build B, Z 5 Ground Floor 3x30 min	**Distributionally Robust Optimization: Models and Applications**, *Organizer*: Selin D Ahipasaoglu, session 355			**Robust**
	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	
DENIGES Build C, Z 5 Ground Floor 3x30 min	**Distributionally Robust Optimization**, *Organizer*: Daniel Kuhn, session 446			**Robust**
	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	
Salle 31 Build B, Z 5 Ground Floor 3x30 min	**Discrete stochastic dynamic programming**, *Chair*: Adam Narkiewicz, session 384			**Markov**
	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	
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			**Game**
	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	

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**, *Organizer*: Jacek Gondzio, session 60			**NLP**
	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	
Salle 05 Build Q, Z 11 1st floor 3x30 min	**Nonlinear Optimization**, *Chair*: Marc C Steinbach, session 429			**NLP**
	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	
Salle 20 Build G, Z 6 1st floor 3x30 min	**Global Optimization 2**, *Chair*: Mirjam Duer, session 502			**Global**
	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	
Salle 8 Build N, Z 12 4th floor 3x30 min	**Advances in the first-order methods for convex optimization**, *Organizer*: Angelia Nedich, session 73			**NonSmooth**
	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	
Salle LC5 Build L, Z 10 Intermediate 1 3x30 min	**Relative Entropy Optimization I**, *Organizer*: Venkat Chandrasekaran, session 111			**SDP**
	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	
Salle 06 Build Q, Z 11 1st floor 3x30 min	**Algorithms for optimization and variational problems with possibly nonisolated solutions II**, *Organizer*: Alexey F. Izmailov, session 153			**Variat**
	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	
Salle ARNOZAN Build Q, Z 8 Ground Floor 3x30 min	**Nash equilibrium and Games 2**, *Organizer*: Giancarlo Bigi, session 366			**Variat**
	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	
Salle 21 Build G, Z 6 Intermediate 3x30 min	**Advances in DFO IV**, *Chair*: Katya Scheinberg, session 125			**DerFree**
	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	

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**, *Organizer*: Aaron Archer, session 477			**Learning**
	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	
FABRE Build J, Z 8 Ground Floor 3x30 min	**Classification, regression and clustering**, *Chair*: Dimitris Bertsimas, session 480			**Learning**
	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	
Salle 24 Build G, Z 6 3rd floor 3x30 min	**Vehicle Routing II**, *Chair*: Chris N Potts, session 412			**Logistics**
	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	
Salle 18 Build I, Z 7 1st floor 3x30 min	**Machine Scheduling 1**, *Chair*: Renan S. Trindade, session 527			**Scheduling**
	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	
Salle DENUCE Build Q, Z 8 Ground Floor 3x30 min	**Estimation and Learning for Power Systems**, *Organizer*: Javad Lavaei, session 25			**Energy**
	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	
Salle 22 Build G, Z 6 2nd floor 3x30 min	**Optimization in Energy**, *Chair*: Andrea Simonetto, session 515			**Energy**
	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	
Salle 23 Build G, Z 6 3rd floor 3x30 min	**Optimization for Energy System Planning**, *Chair*: Andrew Lu Liu, session 524			**Energy**
	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	
Salle LA4 Build L, Z 8 Basement 3x30 min	**Industrial dynamics and Environmental policy**, *Organizer*: Inmaculada Garcia Fernandez, session 392			**Sciences**
	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	
PITRES Build O, Z 8 Ground Floor 3x30 min	**Computational Integer Programming I**, *Organizer*: Domenico Salvagnin, session 273			**Algo**
	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	

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**, *Organizer*: Sebastian Pokutta, session 308			**IPtheory**
	Matteo Fischetti, Building adversarial examples in Neural Networks by Mixed Integer Optimization	Anirbit Mukherjee, Mathematics of Neural Networks	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**, *Chair*: Natashia Boland, session 487			**IPpractice**
	Andre Cire, Discrete Nonlinear Optimization by State-Space Decompositions	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**, *Chair*: Sara Maqrot, session 505			**IPpractice**
	Stefania Pan, A dual ascent procedure for solving the generalized set partitioning model	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** , *Organizer*: Sven Leyffer, session 63			**MINLP**
	Meenarli Sharma, Inversion of Convection-Diffusion PDE with Discrete Source	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**, *Organizer*: Hassan Hijazi, session 92			**MINLP**
	Anya Castillo, Global Optimization for AC Optimal Power Flow Applications	Harsha Nagarajan, Tight Piecewise Formulations and Algorithms for Global Optimization of MINLPs	Hassan Hijazi, Semidefinite Programming Cuts in Gravity	
Salle 35 Build B, Z 4 Intermediate 3x30 min	**Recent Advances and Applications of MINLP**, *Organizer*: Jose M Ucha, session 139			**MINLP**
	Victor Blanco, Duality and multidimensional kernels in ℓ_p-Support Vector Machines	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**, *Organizer*: Nisheeth K Vishnoi, session 161			**APPROX**
	Krishna Gummadi, Measuring Algorithmic (Un)Fairness via Inequality Indices	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**, *Organizer*: Nikhil Bansal, session 164			**APPROX**
	Aleksandar Nikolov, Balancing Vectors in Any Norm	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**, *Organizer*: Stephan Held, session 260			**COMB**
	Dirk Müller, Global Routing with Timing Constraints	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**, *Chair*: Claudio Arbib, session 423			**COMB**
	Xiucui Guan, Critical node problem based on connectivity index and properties of components	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**, *Chair*: Quentin Mercier, session 494			**Stoch**
	Sakina Melloul, Flexible Multi-choice Goal Programming with Fuzzy Data	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**, *Organizer*: Agostinho Agra, session 168			**Robust**
	Ayse Arslan, Robust Strategic Planning of Phytosanitary Treatments in Agriculture	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**, *Organizer*: Peyman Mohajerin Esfaha, session 448			**Robust**
	Viet Anh Nguyen, Risk-Averse Optimization over Structured Wasserstein Ambiguity Set	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**, *Chair*: Alexander V. Hopp, session 383			**Markov**
	Yann Dujardin, Sample-Based Approximate GMDP Solution with Theoretical Guarantees	Giacomo Nannicini, An FPTAS for stochastic DPs 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			**NLP**
	Frank Vallentin, Coloring the Voronoi tessellation of lattices	Cordian Riener, Semidefinite optimization and arithmetic progressions	Philippe Moustrou, The upper density of sets avoiding norm one in the real space of dimension n	
Salle KC7 Build K, Z 10 Intermediate 2 3x30 min	**Subspace methods in NLP II**, *Organizer*: Panos Parpas, session 44			**NLP**
	Panos Parpas, Distributed Subspace Decomposition	Emre Mengi, Subspace Frameworks for Eigenvalue Optimization	Jaroslav Fowkes, A block-coordinate Gauss-Newton method for nonlinear least squares	
Salle 05 Build Q, Z 11 1st floor 4x20 min	**Primal-dual and ADMM algorithms for nonlinear programming**, *Organizer*: Marco Sciandrone, session 91			**NLP**
	Ahmet Alacaoglu, Smooth Primal-Dual Coordinate Descent for Nonsmooth Convex Optimization	N. Serhat Aybat, A primal-dual algorithm for general convex-concave saddle point problems	Mario Figueiredo, ADMM with Plug-and-Play Regularizers: Convergence Guarantees and Applications	Giulio Galvan, Alternating minimization methods for constrained nonconvex optimization
Salle 9 Build N, Z 12 4th floor 3x20 min	**Linear Optimization I**, *Chair*: Jianming Shi, session 415			**NLP**
	Zhize Li, A Fast Polynomial-time Primal-Dual Projection Algorithm for Linear Programming	Jianming Shi, A polarity-based algorithm for solving linear programming problems	Maxim Demenkov, An algorithm for linear programming based on the projection onto a zonotope	
Salle 20 Build G, Z 6 1st floor 3x30 min	**Global Optimization 1**, *Chair*: Jean-Baptist Hiriart-Urruty, session 501			**Global**
	Fabio Schoen, New clustering methods for large scale global optimization	Sergiy Butenko, Continuous Approaches to Cluster-Detection Problems in Networks	Julio González-Díaz, Computational advances in the RLT algorithms: A freely available implementation	
Salle 8 Build N, Z 12 4th floor 3x30 min	**Nonsmooth DC optimization with applications**, *Chair*: Napsu Karmitsa, session 46			**NonSmooth**
	Sona Taheri, PIECEWISE LINEAR REGRESSION VIA NONSMOOTH DC OPTIMIZATION	Kaisa Joki, Double Bundle Method for Nonsmooth DC Optimization	Napsu Karmitsa, Support vector machines for clusterwise linear regression	
Salle LC4 Build L, Z 9 Intermediate 1 3x30 min	**Nonconvex Optimization: Theory and Methods - Part 3**, *Organizer*: Genaro Lopez, session 188			**NonSmooth**
	Alexander Shtof, Globally Solving a Class of Optimal Power Flow Problems in Radial Networks	Matthew Tam, Algorithms based on unions of nonexpansive maps	Genaro Lopez, What do 'convexities' imply on Hadamard manifolds?	
Salle AURIAC Build G, Z 6 1st floor 3x30 min	**Computer-assisted analyses of optimization algorithms II**, *Organizer*: Adrien Taylor, session 16			**SDP**
	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	
Salle LC5 Build L, Z 10 Intermediate 1 3x30 min	**Sparse Semidefinite Programming**, *Organizer*: Somayeh Sojoudi, session 17			**SDP**
	Martin Andersen, Sparse Semidefinite Relaxations of Communicability-Based Graph Partition Problem	Cedric Josz, Lasserre hierarchy for large scale polynomial optimization	Somayeh Sojoudi, Fast Algorithms for Max-Det Matrix Completion and Graphical Lasso	
Salle 06 Build Q, Z 11 1st floor 3x30 min	**Nonlinear Optimization and Variational Inequalities IV**, *Organizer*: Cong Sun, session 144			**Variat**
	Junfeng Yang, A TVSCAD approach for image deblurring with impulsive noise	Chengjing Wang, A semismooth Newton based augmented Lagrangian method for solving SVM problems	Chao Ding, Matrix optimization in data science: recent progress on algorithm foundation	
Salle ARNOZAN Build Q, Z 8 Ground Floor 4x20 min	**Variational Analysis 2**, *Organizer*: David Salas, session 367			**Variat**
	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	David Salas, Quasi-Variational Inequality problems over product sets
Salle KC6 Build K, Z 10 Intermediate 1 4x20 min	**Algorithms for Structured Statistical Optimization**, *Chair*: Ilker Birbil, session 349			**RandomM**
	Ilker Birbil, 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	Saeed Ghadimi, Approximation Methods for Bilevel Programming
Salle 21 Build G, Z 6 Intermediate 2x30 min	**Derivative-free global optimization algorithms**, *Chair*: Zaikun Zhang, session 41			**DerFree**
	Limeng Liu, Optimization with global surrogate and trust-region assisted local search	Anne Auger, Benchmarking Bayesian, Derivative-Free, and Stochastic Blackbox Algorithms		

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			**Learning**
	Maryam Fazel, Competitive Online Algorithms with Application to Optimal Experiment Design	Michael Fanuel, Positive semi-definite embedding for dimensionality reduction	Kimon Fountoulakis, Variational Perspective on Local Graph Clustering	Saverio Salzo, Solving lp-norm regularization with tensor kernels
Salle 18 Build I, Z 7 1st floor 4x20 min	**Transportation networks**, *Chair*: Bernard Gendron, session 359			**Network**
	Parisa Charkhgard, The network maintenance problem	Yasufumi Saruwatari, Airspace sectorization by set-partitioning approach	Bin Li, Joint Transceiver Optimization for Wireless Information and Energy Transfer	Bernard Gendron, Node-Based Lagrangian Relaxations for Multicommodity Network Design
Salle 16 Build I, Z 7 2nd floor 2x20 min	**Logistics Networks**, *Chair*: El Hassan Laaziz, session 468			**Logistics**
	Yasushi Narushima, Robust supply chain network equilibrium model with random demands	Guillaume Marques, Method Benchmarking for Two-Echelon Capacitated Vehicle Routing		
Salle 23 Build G, Z 6 3rd floor 3x30 min	**Energy-aware planning and scheduling 2**, *Organizer*: Christian Artigues, session 178			**Energy**
	Paul Javal, Modelling uncertainties in short-term operational planning optimization	Aurélien Froger, Solving an electric vehicle routing problem with capacitated charging stations	Christian Artigues, Polyhedral approach for a continuous energy-constrained scheduling problem	
Salle 24 Build G, Z 6 3rd floor 3x20 min	**Stochastic Methods for Energy Optimization**, *Chair*: Tristan Rigaut, session 294			**Energy**
	Clara Lage, Stabilization of Price Signals in Energy Optimization	Guilherme Matiussi Ramalho, Stochastic Unit Commitment Problem: an Exact Probabilistic Constrained Approach	Tristan Rigaut, Long term management of energy storage using stochastic optimization	
Salle LA4 Build L, Z 8 Basement 4x20 min	**Optimization and Game Theory**, *Organizer*: Veerle Timmermans, session 402			**Sciences**
	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	Veerle Timmermans, Equilibrium Computation in Atomic Splittable Polymatroid Congestion Games
PITRES Build O, Z 8 Ground Floor 3x30 min	**Computational Integer Programming II**, *Organizer*: Domenico Salvagnin, session 274			**Algo**
	Gregor Hendel, Tighter LP relaxations for configuration knapsacks using extended formulations	Dimitrios Letsios, Lexicographic Optimization and Recovery in Two-Stage Robust Scheduling	Roland Wunderling, Dynamic Row Disablement: a practical Implementation of the Kernel Simplex Method	