Room	Salle 47 - Build A - 3rd floor - Zone 1			
Th 8:30am-10:30am 4x30 min	**Performance Analysis**, *Organizer*: Charlotte Truchet			
	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	Salle 42 - Build C - 3rd floor - Zone 1			
We 8:30am-10:30am 4x30 min	**Primal Algorithms for Integer Programming Problems**, *Organizer*: Daniel Aloise			
	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
Th 3:15pm-4:45pm 3x30 min	**Non-Standard IP Methods**, *Chair*: Ulf Friedrich			
	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	
Th 5:00pm-6:30pm 3x30 min	**Cutting Planes for Special Problems**, *Chair*: Eleazar Madriz			
	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.	
Fr 3:15pm-4:45pm 3x30 min	**Extended Formulations**, *Chair*: Bartosz Filipecki			
	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	

Room	Salle 43 - Build C - 3rd floor - Zone 1			
Mo 3:15pm-4:45pm 3x30 min	**Provable guarantees for Cut Generating Functions**, *Organizer*: Amitabh Basu			
	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	
Mo 5:00pm-6:30pm 4x20 min	**Algorithms for matching markets**, *Organizer*: Amin Saberi			
	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
Tu 8:30am-10:30am 4x30 min	**Extended formulations**, *Organizer*: Stefan Weltge			
	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
Tu 3:15pm-4:45pm 3x30 min	**MIP under Uncertainty 2**, *Organizer*: Simge Kucukyavuz			
	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.	
We 8:30am-10:30am 4x30 min	**Determinantal structures of IPs**, *Organizer*: Martin Henk			
	Stephan Artmann, Width in congruency-constrained TU-systems.	Friedrich Eisenbrand, Faster algorithms for Integer Programming using the Steinitz Lemma	Christoph Glanzer, On the number of distinct rows of a matrix with bounded sub-determinants	Robert Weismantel, Distances between LPs, IPs and MIPs
We 3:15pm-4:45pm 3x30 min	**Network Design and Routing**, *Chair*: Yuko Kuroki			
	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	
We 5:00pm-6:30pm 2x30 min	**IP-Formulations**, *Chair*: Temitayo Ajayi			
	Wolfgang Riedl, The quadratic assignment problem: a comparison of two linearizations	Temitayo Ajayi, Assessing Parametrized Linear Programming Relaxations With Superadditive Duality		
Th 8:30am-10:30am 4x30 min	**Cycles and Trees**, *Organizer*: Tobias Mömke			
	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
Th 3:15pm-4:45pm 3x30 min	**Polynomial Time Solvable Problems and Complete Descriptions**, *Chair*: Andreas Bärmann			
	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	
Th 5:00pm-6:30pm 4x20 min	**Advances in Integer Programming**, *Organizer*: Robert Hildebrand			
	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
Fr 8:30am-10:30am 4x30 min	**Recent advances in Integer Optimization**, *Organizer*: Alberto Del Pia			
	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
Fr 3:15pm-4:45pm 3x30 min	**Submodular and Incremental Maximization**, *Organizer*: Martin Gross			
	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	
Fr 5:00pm-6:30pm 3x30 min	**Algorithmic Discrepancy**, *Organizer*: Nikhil Bansal			
	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	

Room	Salle 41 - Build C - 3rd floor - Zone 1			
Mo 3:15pm-4:45pm 3x30 min	**Scheduling with setup, uncertainty and precedences**, *Organizer*: Monaldo Mastrolilli			
	KIM-MANUEL KLEIN, Empowering the Configuration-IP	NICOLE MEGOW, Scheduling under Explorable Uncertainty	JOSE VERSCHAE, Min-sum scheduling under precedence constraints	
Mo 5:00pm-6:30pm 4x20 min	**Practical aspects of network optimization**, *Chair*: Kai Hoppmann			
	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
Tu 8:30am-10:30am 4x30 min	**Equilibrium Computation in Congestion Games**, *Organizer*: Umang Bhaskar			
	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
Tu 3:15pm-4:45pm 3x30 min	**New developments in prophet inequalities and related settings**, *Organizer*: Ruben Hoeksma			
	ASHISH CHIPLUNKAR, Prophet Inequality and Prophet Secretary	BRENDAN LUCIER, Prophets, Secretaries, and Prices	TIM OOSTERWIJK, Posted Prices and Threshold Strategies for Random Arrivals	
We 8:30am-10:30am 4x30 min	**Discrete Convex Analysis**, *Organizer*: Akiyoshi Shioura			
	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
We 3:15pm-4:45pm 3x30 min	**Variants of the Assignment problem**, *Organizer*: Kavitha Telikepalli			
	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	
We 5:00pm-6:30pm 4x20 min	**Connectivity problems and Steiner trees**, *Chair*: Andreas E Feldmann			
	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
Th 8:30am-10:30am 4x30 min	**Graphs and clutters**, *Organizer*: Gerard Cornuejols			
	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
Th 5:00pm-6:30pm 3x30 min	**Approximation algorithms for combinatorial optimization problems**, *Organizer*: Thomas Rothvoss			
	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	
Fr 8:30am-10:30am 4x30 min	**Recent progress in graph cut problems**, *Organizer*: Karthekeyan Chandrasekaran			
	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
Fr 5:00pm-6:30pm 4x20 min	**Optimization problems in graphs and related**, *Chair*: Claudio Arbib			
	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	Salle 44 - Build C - 3rd floor - Zone 1			
Mo 3:15pm-4:45pm 3x30 min	**IP Practice I**, *Chair*: Maurice Queyranne 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	
Mo 5:00pm-6:30pm 4x20 min	**Data Mining**, *Chair*: Marcus V Poggi 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
Tu 8:30am-10:30am 4x30 min	**Machine Learning for Optimization**, *Organizer*: Bistra Dilkina 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
Tu 3:15pm-4:45pm 3x30 min	**Symmetry Handling in Integer Programs**, *Organizer*: Christopher Hojny 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	
We 8:30am-10:30am 4x30 min	**Benders Decomposition for Combinatorial and Bilevel Optimization**, *Organizer*: Fabio Furini 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
We 3:15pm-4:45pm 3x30 min	**Knapsack Problems**, *Organizer*: Enrico Malaguti 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	
We 5:00pm-6:30pm 3x30 min	**Exact Approaches for Vehicle Routing and Variants**, *Organizer*: Ricardo Fukasawa 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	
Th 8:30am-10:30am 4x30 min	**Advanced Linear(ized) MIP Formulations for Zero-One Programs**, *Organizer*: Sven Mallach 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
Th 3:15pm-4:45pm 3x30 min	**Computational Issues in Integer Programming**, *Organizer*: Ricardo Fukasawa 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	
Th 5:00pm-6:30pm 4x20 min	**Cutting Planes**, *Chair*: Fabrizio Marinelli Edvin Åblad, 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
Fr 8:30am-10:30am 4x30 min	**Integer Programming and Crew Scheduling**, *Organizer*: Francois Soumis 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
Fr 3:15pm-4:45pm 3x30 min	**Routing**, *Chair*: Cole Smith 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	
Fr 5:00pm-6:30pm 4x20 min	**Decomposition II**, *Chair*: Natashia Boland 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

Room	**Salle 39 - Build E - 3rd floor - Zone 1**			
Mo 3:15pm-4:45pm 3x30 min	**Exact Optimization Algorithms for Compressed Sensing**, *Organizer*: Marc E Pfetsch			
	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	
Mo 5:00pm-6:30pm 3x30 min	**Polynomial optimization in binary variables**, *Organizer*: Elisabeth Rodriguez-Heck			
	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	
Tu 8:30am-10:30am 4x30 min	**Exact approaches for problems over lattices and graphs**, *Chair*: Daniele Catanzaro			
	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
Tu 3:15pm-4:45pm 3x30 min	**Submodular optimization and beyond**, *Chair*: Satoru Iwata			
	MARTIN NÄGELE, Submodular Minimization Under Congruency Constraints	KENJIRO TAKAZAWA, The b-branching Problem: TDI System, Packing, and Discrete Convexity	SATORU IWATA, Index Reduction via Unimodular Transformations	
We 8:30am-10:30am 4x30 min	**Optimization under uncertainty**, *Organizer*: Marco Molinaro			
	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
We 3:15pm-4:45pm 3x30 min	**Polyhedral aspects of combinatorial optimization problems**, *Chair*: Guillerme Duvillié			
	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	
We 5:00pm-6:30pm 4x20 min	**Shortest paths and cutting stock**, *Chair*: Arnaud Vandaele			
	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
Th 8:30am-10:30am 4x30 min	**Graph theory**, *Chair*: Thomas Bellitto			
	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
Th 3:15pm-4:45pm 3x30 min	**Convexification and more (I)**, *Organizer*: Jon Lee			
	MARCIA FAMPA, Treating indefinite quadratic and bilinear forms in MINLP	AMÉLIE LAMBERT, Valid inequalities for QCQPs	LUZE XU, More Virtuous Smoothing	
Th 5:00pm-6:30pm 4x20 min	**Heuristics for combinatorial optimization problems**, *Chair*: Evren Guney			
	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
Fr 8:30am-10:30am 4x30 min	**Algorithmic aspects of connectivity in network design**, *Organizer*: Neil Olver			
	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
Fr 3:15pm-4:45pm 3x30 min	**Outer Convexification and Mixed-Integer Optimal Control**, *Organizer*: Sebastian Sager			
	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	
Fr 5:00pm-6:30pm 3x30 min	**Global Optimization for nonconvex MINLPs**, *Organizer*: Hassan Hijazi			
	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	

Room	LEYTEIRE - Build E - 3rd floor - Zone 1			
Mo 3:15pm-4:45pm 3x30 min	**Geometry of Polynomials and Applications in Approximate Counting**, *Organizer*: Shayan Oveis Gharan			
	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	
Mo 5:00pm-6:30pm 3x30 min	**Scheduling and File Migration**, *Chair*: Asaf Levin			
	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	
Tu 8:30am-10:30am 4x30 min	**Streaming**, *Organizer*: Michael Kapralov			
	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
Tu 3:15pm-4:45pm 3x30 min	**Algorithms in the Sharing Economy**, *Organizer*: David Shmoys			
	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	
We 8:30am-10:30am 4x30 min	**Approximation Algorithms for the Traveling Salesman Problem**, *Organizer*: Anke van Zuylen			
	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
We 11:00am-12:00am 1x60 min	**Model-Based Methods, Sampling Models, and A New Second-Order Model-Based Method**, *Organizer*: Stefan M Wild			
	Luis Nunes Vicente, Model-Based Methods, Sampling Models, and A New Second-Order Model-Based Method			
We 3:15pm-4:45pm 3x30 min	**Clustering**, *Organizer*: Mohammad R Salavatipour			
	Aravindan Vijayaraghavan, Clustering Mixtures of Well-Separated Gaussians	Konstantin Makarychev, Correlation Clustering	Melanie Schmidt, Analysis of Ward's method	
We 5:00pm-6:30pm 3x30 min	**Approximation Algorithms for Geometric Packing Problems**, *Organizer*: Fabrizio Grandoni			
	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	
Th 8:30am-10:30am 4x30 min	**Submodular Maximization**, *Organizer*: Moran Feldman			
	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
Th 3:15pm-4:45pm 3x30 min	**Approximation Algorithms for Clustering.**, *Organizer*: Deeparnab Chakrabarty			
	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	
Th 5:00pm-6:30pm 3x30 min	**Approximation Algorithms for Optimization under Uncertainty**, *Organizer*: Marc Uetz			
	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	
Fr 8:30am-10:30am 4x30 min	**Data-Driven Revenue Management with Customer Choice**, *Organizer*: Jacob Feldman			
	Antoine Desir, Constrained Assortment Optimization under the Markov Chain based Choice Model	Ali Aouad, Near-Optimal Approximations for Dynamic Assortment Planning under the MNL Model	Ali Aouad, Near-Optimal Approximations for Display Optimization Under MNL Preferences	Jacob Feldman, New Results for Assortment Optimization under the Exponential Choice Model
Fr 11:00am-12:00am 1x60 min	**Majority judgment**, *Organizer*: Martine Labbé			
	Michel Balinski, Majority judgment			
Fr 3:15pm-4:45pm 3x30 min	**Submodular Maximization.**, *Organizer*: Justin Ward			
	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	
Fr 5:00pm-6:30pm 4x20 min	**Algorithmic Fairness and Optimization**, *Organizer*: Nisheeth K Vishnoi			
	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

Room	DURKHEIM - Build A - 3rd floor - Zone 1			
Mo 3:15pm-4:45pm 3x30 min	**Global Optimization**, *Organizer*: Hassan Hijazi 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	
Mo 5:00pm-6:30pm 3x30 min	**Mixed-Integer Conic Optimization**, *Organizer*: Sven Wiese 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	
Tu 8:30am-10:30am 4x30 min	**Graphical Optimization Model 1**, *Organizer*: Joris Kinable 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
Tu 3:15pm-4:45pm 3x30 min	**Applications in Mixed-Integer Quadratic Programming**, *Organizer*: Boshi Yang 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	
We 8:30am-10:30am 4x30 min	**Learning in CP**, *Organizer*: Arnaud Lallouet 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
We 3:15pm-4:45pm 3x30 min	**Decomposition methods for MINLP**, *Organizer*: Ivo Nowak 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	
We 5:00pm-6:30pm 3x30 min	**MINLP (III)**, *Organizer*: Daniel Bienstock 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	
Th 8:30am-10:30am 4x30 min	**Parallel Computing and Sustainability**, *Organizer*: Bistra Dilkina 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
Th 3:15pm-4:45pm 3x30 min	**Applications of CP**, *Organizer*: Louis-Martin Rousseau 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	
Th 5:00pm-6:30pm 3x30 min	**Convexification and more (II)**, *Organizer*: Akshay Gupte 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	
Fr 8:30am-10:30am 4x30 min	**Graphical Optimization Model 2**, *Organizer*: Maria I. Restrepo 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
Fr 3:15pm-4:45pm 3x30 min	**Intersection cuts, disjunctions, and valid inequalities**, *Organizer*: Eli Towle 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	
Fr 5:00pm-6:30pm 3x30 min	**Mixed-Integer PDE-Constrained Optimization**, *Organizer*: Sven Leyffer 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	

Room	SIGALAS - Build C - 2nd floor - Zone 2			
Mo 1:30pm-2:30pm 1x60 min	**What's happening in nonconvex optimization? A couple of stories**, *Organizer*: Jean-Baptist Hiriart-Urruty			
	EMMANUEL CANDES, What's happening in nonconvex optimization? A couple of stories			
Mo 3:15pm-4:45pm 3x30 min	**On the Tree Augmentation Problem**, *Organizer*: Laura Sanità			
	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	
Mo 5:00pm-6:30pm 4x20 min	**Combinatorial optimization and convexity**, *Chair*: Yu Yokoi			
	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
Tu 8:30am-10:30am 4x30 min	**Matching games and beyond**, *Organizer*: Jochen Koenemann			
	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
Tu 3:15pm-4:45pm	**A.W. Tucker Prize Session**, *Chair*: Simge Kucukyavuz			
We 8:30am-10:30am 4x30 min	**Stochastic optimization**, *Chair*: Alexei A. Gaivoronski			
	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
We 3:15pm-4:45pm 3x30 min	**Logistics**, *Chair*: Frieder Smolny			
	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	
We 5:00pm-6:30pm 4x20 min	**Solvers and softwares**, *Chair*: François Clautiaux			
	JULIEN DARLAY, Solving packing, routing and scheduling problems using Local-Solver	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
Th 8:30am-10:30am 4x30 min	**Energy**, *Chair*: Kazem Abbaszadeh			
	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
Th 3:15pm-4:45pm 3x30 min	**Algorithms for TSP**, *Organizer*: Ola Svensson			
	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	
Th 5:00pm-6:30pm 4x20 min	**Planning**, *Chair*: Jeanjean Antoine			
	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
Fr 8:30am-10:30am 4x30 min	**Matching and scheduling**, *Organizer*: Seffi Naor			
	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
Fr 3:15pm-4:45pm 3x30 min	**Combinatorial aspects of Linear Programming**, *Organizer*: Daniel Dadush			
	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	
Fr 5:00pm-6:30pm 3x30 min	**Packing Steiner Trees**, *Organizer*: Stephan Held			
	DIRK MÜLLER, Global Routing with Timing Constraints	PIETRO SACCARDI, Steiner Tree Packing in Rhomboidal Tiles	TILMANN BIHLER, Reach- and Direction-Restricted Rectilinear Steiner Trees	

Room	Salle 34 - Build B - 1st floor - Zone 3			
Mo 3:15pm-4:45pm 3x30 min	**Tight relaxations in nonconvex MINLP**, *Organizer*: Ambros Gleixner			
	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	
Mo 5:00pm-6:30pm 3x30 min	**Lattice methods in Integer Optimisation**, *Organizer*: Iskander Aliev			
	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	
Tu 8:30am-10:30am 3x30 min	**MIP under Uncertainty 1**, *Organizer*: Fatma Kilinc-Karzan			
		Shabbir Ahmed, Distributionally Robust Combinatorial Optimization	Simge Kucukyavuz, Risk-Averse Set Covering Problems	Ruiwei Jiang, Mixed-Integer Recourse via Prioritization
Tu 3:15pm-4:45pm 3x30 min	**Convex relaxations in MINLP**, *Organizer*: Adam N Letchford			
	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	
We 8:30am-10:30am 3x30 min	**MINLP (I)**, *Organizer*: Daniel Bienstock			
		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
We 3:15pm-4:45pm 3x30 min	**MINLP (II)**, *Organizer*: Daniel Bienstock			
	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	
We 5:00pm-6:30pm 3x30 min	**Robust Approaches for Challenging Uncertain Optimization Problems**, *Organizer*: Frauke Liers			
	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	
Th 8:30am-10:30am 4x30 min	**Integer linear programming, convex geometry, and lattices**, *Organizer*: Sinai Robins			
	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
Th 3:15pm-4:45pm 3x30 min	**Heuristics in MINLP**, *Chair*: Bertrand Travacca			
	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	
Th 5:00pm-6:30pm 3x30 min	**Relaxations in MINLP**, *Chair*: Jan Kronqvist			
	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	
Fr 8:30am-10:30am 3x30 min	**Optimal Control Problems with Discrete Switches**, *Organizer*: Christian Kirches			
		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
Fr 3:15pm-4:45pm 3x30 min	**Polyhedral theory in practice**, *Organizer*: Mourad Baiou			
	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	
Fr 5:00pm-6:30pm 4x20 min	**Machine Learning and Discrete Optimization**, *Organizer*: Sebastian Pokutta			
	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

Room	Salle 36 - Build B - Intermediate - Zone 4			
Mo 3:15pm-4:45pm 3x30 min	**Matching and Matroids**, *Organizer*: José A Soto 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	
Mo 5:00pm-6:30pm 4x20 min	**IP Practice II**, *Chair*: Petra M. Bartmeyer 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
Tu 8:30am-10:30am 4x30 min	**Approximation Algorithms for Clustering**, *Organizer*: Chaitanya Swamy 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
Tu 3:15pm-4:45pm 3x30 min	**Local Search and Facility Location**, *Organizer*: Felix Willamowski 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	
We 8:30am-10:30am 4x30 min	**Approximation Algorithms for Scheduling Problems**, *Organizer*: Nicole Megow 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
We 3:15pm-4:45pm 3x30 min	**Decomposition I**, *Chair*: Dieter Weninger 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	
We 5:00pm-6:30pm 3x30 min	**Online Optimization**, *Organizer*: Kevin Schewior 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	
Th 8:30am-10:30am 4x30 min	**Bin Packing**, *Chair*: Frits CR Spieksma 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
Th 3:15pm-4:45pm 3x30 min	**Routing and Inventory**, *Organizer*: Dorit Hochbaum 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	
Th 5:00pm-6:30pm 4x20 min	**Matching Problems**, *Organizer*: Sergio García Quiles 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
Fr 8:30am-10:30am 4x30 min	**Clustering.**, *Organizer*: Zac Friggstad 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
Fr 3:15pm-4:45pm 3x30 min	**IP Practice III**, *Chair*: Samuel S Brito 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	
Fr 5:00pm-6:30pm 2x20 min	**Dual Ascent**, *Chair*: Sara Maqrot 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		

Room	Salle 35 - Build B - Intermediate - Zone 4			
Mo 3:15pm-4:45pm 3x30 min	**MINLP methods in gas transport optimization (I)**, *Organizer*: Lars Schewe			
	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	
Mo 5:00pm-6:30pm 3x30 min	**MINLP methods in gas transport optimization (II)**, *Organizer*: Lars Schewe			
	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	
Tu 8:30am-10:30am 4x30 min	**Cutting Planes for Integer Programs**, *Chair*: Matthias Köppe			
	Jiawei Wang, Characterization and Approximation of General Dual-Feasible Functions	Yuan Zhou, All finite group complexity injects	Daniel Porumbel, Projective cutting-planes by projecting interior points onto polytope facets	Matthias Köppe, cutgeneratingfunctionology: Python software for CGFs and super-additive duality
Tu 3:15pm-4:45pm 3x30 min	**Applications of MINLP**, *Organizer*: Dolores Romero Morales			
	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	
We 8:30am-10:30am 4x30 min	**Advances in Integer Programming**, *Organizer*: Santanu S Dey			
	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
We 3:15pm-4:45pm 3x30 min	**MINLP for Data Science**, *Organizer*: Vanesa Guerrero			
	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	
We 5:00pm-6:30pm 3x30 min	**Advances in MINLP**, *Organizer*: Laura Palagi			
	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	
Th 8:30am-10:30am 4x30 min	**Convexity and Polytopes**, *Chair*: David Warme			
	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
Th 3:15pm-4:45pm 3x30 min	**MINLP with quadratic terms**, *Chair*: Enrico Bettiol			
	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	
Th 5:00pm-6:30pm 3x30 min	**Applications in MINLP**, *Chair*: Justo Puerto			
	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	
Fr 8:30am-10:30am 4x30 min	**Mixed Integer Programming Representability**, *Organizer*: Juan Pablo Vielma			
	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
Fr 3:15pm-4:45pm 3x30 min	**Branch-and-cut techniques**, *Organizer*: Teodora Dan			
	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	
Fr 5:00pm-6:30pm 3x30 min	**Recent Advances and Applications of MINLP**, *Organizer*: Jose M Ucha			
	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	

Room	Salle 37 - Build B - Intermediate - Zone 4			
Mo 5:00pm-6:30pm 3x20 min	**New models in robust optimization**, *Chair*: Juan S Borrero 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	
Tu 8:30am-10:30am 3x30 min	**Nonlinear Optimization with Uncertain Constraints**, *Organizer*: Charlie Vanaret	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
We 8:30am-10:30am 4x30 min	**Interfaces of Applied Probability and Optimization**, *Organizer*: Omar El Housni 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
We 3:15pm-4:45pm 3x30 min	**Cursing the Dimensionality: Two-Stage and Multi-Stage Robust Optimization**, *Organizer*: Angelos Tsoukalas 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	
We 5:00pm-6:30pm 2x30 min	**Robust Adaptive Control and Learning**, *Organizer*: Siqian Shen Siqian Shen, Distributionally Robust Adaptive Control under Nonstationary Uncertainty	Lauren Steimle, Leveraging stochastic programming to design robust policies for Markov decision		
Th 8:30am-10:30am 4x30 min	**K-adaptability**, *Organizer*: Anirudh Subramanyam 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
Th 3:15pm-4:45pm 3x30 min	**Non-linear robust optimization**, *Chair*: Laurent Alfandari 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	
Th 5:00pm-6:30pm 4x20 min	**Combinatorial robust optimization I**, *Organizer*: Marc Goerigk 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
Fr 5:00pm-6:30pm 4x20 min	**Robust Combinatorial Optimization II**, *Organizer*: Agostinho Agra 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

Room	Salle 30 - Build B - Ground Floor - Zone 5			
Mo 3:15pm-4:45pm 3x30 min	**Risk and Energy Markets**, *Chair*: Julio Deride 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	
Mo 5:00pm-6:30pm 3x20 min	**Differentiability, convexity, and modeling in stochastic optimization**, *Chair*: Kai A. Spuerkel 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	
Tu 8:30am-10:30am 4x30 min	**Algorithmic Game Theory I**, *Organizer*: Luce Brotcorne 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
Tu 3:15pm-4:45pm 3x30 min	**Game Theory and Energy Markets**, *Chair*: Didier Aussel ANTON SVENSSON, Constraint qualification for parametrized optimization problems and applications	LÉONARD vonNIEDERHÄUSERN, TrEMa: A Trilevel Energy Market Model	DIDIER AUSSEL, Electricity market model with elastic demand	
We 8:30am-10:30am 4x30 min	**Risk and Financial Markets**, *Chair*: Markku J Kallio 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
We 3:15pm-4:45pm 3x30 min	**Nonconvex and Complex Problems in Multiobjective Optimization**, *Chair*: Gabriele Eichfelder 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	
We 5:00pm-6:30pm 3x30 min	**Aspects of Multiobjective Combinatorial Optimization**, *Organizer*: Matthias Ehrgott 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 Multiobjective Shortest Path Problem in Practice	
Th 8:30am-10:30am 4x30 min	**Stackelberg Games**, *Chair*: Stefano Coniglio 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
Th 3:15pm-4:45pm 3x30 min	**Generation and Representation Algorithms in Multiobjective Optimization**, *Organizer*: Michael Stiglmayr 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	
Th 5:00pm-6:30pm 3x20 min	**Topics in multistage stochastic optimization**, *Chair*: Felipe Beltrán 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	
Fr 8:30am-10:30am 4x30 min	**Algorithmic Game Theory II**, *Chair*: Margarida Carvalho 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
Fr 3:15pm-4:45pm 3x30 min	**Scalarization, representation and the comparison of methods in Multiobjective Optimization**, *Chair*: Tyler Perini 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	
Fr 5:00pm-6:30pm 3x20 min	**Topics in stochastic optimization**, *Chair*: Quentin Mercier 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	

Room	Salle 31 - Build B - Ground Floor - Zone 5		
Mo 3:15pm-4:45pm 3x30 min	**Approximate dynamic programming**, *Organizer*: David Brown 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
Mo 5:00pm-6:30pm 2x30 min	**Learning and dynamic programming**, *Chair*: Boxiao Chen 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	
Tu 8:30am-10:30am 4x30 min	**Algorithms for stochastic games : new approaches**, *Organizer*: Hugo Gimbert 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
Tu 3:15pm-4:45pm 3x30 min	**Market places and dynamic programming**, *Chair*: Dan A Iancu 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
We 3:15pm-4:45pm 2x30 min	**Dynamic programming applications**, *Chair*: Susanne Hoffmeister Susanne Hoffmeister, Markov Decision Processes for Sport Strategy Optimization	Paolo Serafini, A Model to evaluate the cost-effectiveness trade-off for urologic treatments	
Th 5:00pm-6:30pm 3x30 min	**Approximation in dynamic programming**, *Chair*: Philip C Placek 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
Fr 8:30am-10:30am 4x30 min	**Advances in theory of dynamic programming**, *Chair*: Stephane L Gaubert 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
Fr 3:15pm-4:45pm 3x30 min	**Discrete stochastic dynamic programming**, *Chair*: Adam Narkiewicz 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
Fr 5:00pm-6:30pm 3x30 min	**Tractability and approximation algorithms in dynamic programming**, *Chair*: Alexander V. Hopp 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	Salle 32 - Build B - Ground Floor - Zone 5			
Mo 3:15pm-4:45pm 3x30 min	**Scenario discretization techniques in stochastic optimization**, *Organizer*: Fabian Bastin			
	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	
Mo 5:00pm-6:30pm 3x30 min	**Distributionally Robust Stochastic Programming: Theory and Applications**, *Organizer*: Ran Ji			
	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	
Tu 3:15pm-4:45pm 3x30 min	**Distributionally Robust and Stochastic Optimization: A Sampling/Scenario Perspective**, *Organizer*: Guzin Bayraksan			
	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	
We 8:30am-10:30am 3x30 min	**Sampling and stability in stochastic optimization**, *Chair*: Harsha Honnappa			
		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
We 3:15pm-4:45pm 3x30 min	**Learning and Stochastic Programming**, *Organizer*: Matthias Poloczek			
	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	
We 5:00pm-6:30pm 4x20 min	**Stochastic optimization models and applications**, *Chair*: F.-Javier Heredia			
	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
Th 8:30am-10:30am 4x30 min	**Topics in multistage and integer stochastic optimization**, *Organizer*: Jim Luedtke			
	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
Th 3:15pm-4:45pm 3x30 min	**Theoreticals and practicals aspects of decomposition algorithms for multistage stochastic problems: 1**, *Organizer*: Vincent Leclère			
	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	
Th 5:00pm-6:30pm 4x20 min	**Theoreticals and practicals aspects of decomposition algorithms for multistage stochastic problems: 2**, *Organizer*: Vincent Leclère			
	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
Fr 8:30am-10:30am 4x30 min	**New methods for stochastic optimization and variational inequalities**, *Chair*: Yunxiao Deng			
	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
Fr 3:15pm-4:45pm 3x30 min	**Risk-aware decision making**, *Organizer*: Minseok Ryu			
	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	

Room	Salle 33 - Build B - Ground Floor - Zone 5			
Mo 3:15pm-4:45pm 3x30 min	**Distributionally Robust Optimization - New Theory and Applications**, *Organizer*: Zhichao Zheng			
	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	
Tu 8:30am-10:30am 3x30 min	**Robust Optimization and Operations Mangement**, *Organizer*: Chaithanya Bandi			
		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
Tu 3:15pm-4:45pm 3x30 min	**Recent Advances in Robust Optimization I**, *Organizer*: Phebe Vayanos			
	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	
We 8:30am-10:30am 4x30 min	**Robust combinatorial optimization IV**, *Chair*: Arie Koster			
	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
We 5:00pm-6:30pm 4x20 min	**Robust combinatorial optimization III**, *Organizer*: Moritz Mühlenthaler			
	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
Th 8:30am-10:30am 3x30 min	**New applications of robust optimizations**, *Chair*: Mirjam Duer			
		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
Fr 8:30am-10:30am 3x30 min	**New Horizons in Robust Optimization**, *Organizer*: Angelos Georghiou			
		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
Fr 3:15pm-4:45pm 3x30 min	**Distributionally Robust Optimization: Models and Applications**, *Organizer*: Selin D Ahipasaoglu			
	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	
Fr 5:00pm-6:30pm 3x30 min	**Wasserstein Distributionally Robust Optimization**, *Organizer*: Peyman Mohajerin Esfaha			
	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	

Room	DENIGES - Build C - Ground Floor - Zone 5			
Mo 1:30pm-2:30pm 1x60 min	**Theoretical Analysis of Cutting-Planes in IP Solvers.**, *Organizer*: Gerard Cornuejols SANTANU DEY, Theoretical Analysis of Cutting-Plane Selection in IP Solvers.			
Mo 3:15pm-4:45pm 3x30 min	**Preference robust optimization**, *Organizer*: Erick Delage 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	
Mo 5:00pm-6:30pm 3x30 min	**Advances in Adjustable Robust Optimization**, *Organizer*: Do Young Yoon 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	
Tu 8:30am-10:30am 4x30 min	**Risk-averse stochastic programming**, *Organizer*: Andrzej Ruszczynski 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
Tu 11:00am-12:00am 1x60 min	**Asymptotic Lagrangian duality for nonsmooth optimization**, *Organizer*: Xiaojun Chen REGINA BURACHIK, Asymptotic Lagrangian duality for nonsmooth optimization			
Tu 3:15pm-4:45pm 3x30 min	**Recent Advances in Robust Optimization II**, *Organizer*: Wolfram Wiesemann 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	
We 8:30am-10:30am 4x30 min	**Chance Constraint and Its Applications**, *Organizer*: Jianqiang Cheng 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
We 11:00am-12:00am 1x60 min	**Online Competitive Algorithms for Resource Allocation**, *Organizer*: Frank E. Curtis MARYAM FAZEL, Online Competitive Algorithms for Resource Allocation			
We 3:15pm-4:45pm 3x30 min	**Dynamic Optimization: Theory and Algorithms**, *Organizer*: Vineet Goyal 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	
We 5:00pm-6:30pm 3x30 min	**Stochastic Programming and Distributionally Robust Optimization Models with Endogenous Uncertainty**, *Organizer*: Miguel Lejeune 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	
Th 8:30am-10:30am 4x30 min	**New results in chance-constrained optimization**, *Chair*: Bismark Singh 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
Th 11:00am-12:00am 1x60 min	**Effective Scenarios and Scenario Reduction for Risk-Averse Stochastic Programs**, *Organizer*: Jim Luedtke TITO HOMEM-DE-MELLO, Effective Scenarios and Scenario Reduction for Risk-Averse Stochastic Programs			
Th 3:15pm-4:45pm 3x30 min	**Distributionally Robust Optimization With Marginals and Cones**, *Organizer*: Divya Padmanabhan 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	
Th 5:00pm-6:30pm 3x30 min	**Robust Optimization under Data Uncertainty**, *Organizer*: Omid Nohadani MATTHIAS EHRGOTT, Uncertain Data Envelopment Analysis	SOROOSH SHAFIEEZADEH, Wasserstein Distributionally Robust Kalman Filtering	ZHENZHEN YAN, Appointment Scheduling Under Time-Dependent Patient No-Show Behavior	
Fr 8:30am-10:30am 4x30 min	**Theoreticals and practicals aspects of decomposition algorithms for multistage stochastic problems: 3**, *Organizer*: Vincent Leclère 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
Fr 11:00am-12:00am 1x60 min	**Submodularity in mixed-integer quadratic and conic quadratic optimization**, *Organizer*: Daniel Bienstock ALPER ATAMTURK, Submodularity in mixed-integer quadratic and conic quadratic optimization			
Fr 3:15pm-4:45pm 3x30 min	**Distributionally Robust Optimization**, *Organizer*: Daniel Kuhn 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	

Room	Salle 22 - Build G - 2nd floor - Zone 6			
Mo 3:15pm-4:45pm 2x30 min	**Implementation of interior-point methods for large-scale problems and applications I,** *Organizer*: Jordi Castro 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		
Mo 5:00pm-6:30pm 4x20 min	**Sparsity, variable selection and efficient algorithms**, *Chair*: Alex Sholokhov 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
Tu 8:30am-10:30am 4x30 min	**Pricing**, *Chair*: Anastasiya Ivanova 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
Tu 3:15pm-4:45pm 2x30 min	**Learning for mixed integer optimization**, *Chair*: Hari Bandi Hari Bandi, Learning a Mixture of Gaussians via Mixed Integer Optimization	Takanori Maehara, Learning for Tuning Parameters of NUOPT MILP Solver		
We 8:30am-10:30am 4x30 min	**Numerically Efficient Methods for Piecewise Algorithmic Differentiation I**, *Organizer*: Torsten F Bosse 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
We 3:15pm-4:45pm 3x30 min	**Structure Detection in Integer Programming**, *Organizer*: Taghi Khaniyev 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	
We 5:00pm-6:30pm 2x20 min	**Large-scale convex optimization**, *Chair*: Alexander V. Rogozin Alexander Rogozin, Optimal distributed convex optimization on slowly time-varying graphs	Tommaso Colombo, Leverage data structure to improve Stochastic Gradient Descent algorithm		
Th 8:30am-10:30am 4x30 min	**Numerically Efficient Methods for Piecewise Algorithmic Differentiation II**, *Organizer*: Torsten F Bosse 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
Th 3:15pm-4:45pm 3x30 min	**High-Performance Computing in Optimization II**, *Chair*: Joaquim Dias Garcia 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	
Th 5:00pm-6:30pm 4x20 min	**Ranking and recommendation**, *Chair*: Aleksandra Burashnikova 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
Fr 8:30am-10:30am 4x30 min	**New Developments in Optimization Modeling Software**, *Organizer*: Robert Fourer 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
Fr 3:15pm-4:45pm 3x30 min	**Optimization in Energy**, *Chair*: Andrea Simonetto 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 AURIAC - Build G - 1st floor - Zone 6

Room				
Mo 3:15pm-4:45pm 3x30 min	**Theory and Methods for ODE- and PDE-Constrained Optimization 1**, *Chair*: Carl M Greiff			
	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	
Mo 5:00pm-6:30pm 4x20 min	**Advances in optimization methods for time dependent problems:I**, *Organizer*: Matthias Heinkenschloss			
	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
Tu 8:30am-10:30am 4x30 min	**Optimization Methods for PDE Constrained Problems**, *Organizer*: Michael Ulbrich			
	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
Tu 3:15pm-4:45pm 3x30 min	**Optimal Control and PDE Constrained Optimization**, *Organizer*: Hasnaa Zidani			
	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	
We 8:30am-10:30am 4x30 min	**Recent Advances in Conic Programming II**, *Organizer*: Sena Safarina			
	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
We 3:15pm-4:45pm 3x30 min	**Risk-Averse PDE-Constrained Optimization–Methods and Applications**, *Organizer*: Harbir Antil			
	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	
We 5:00pm-6:30pm 4x20 min	**Advances in optimization methods for time dependent problems II**, *Organizer*: Denis Ridzal			
	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
Th 8:30am-10:30am 4x30 min	**Optimal Control of Variational Inequalities and Complementarity Systems**, *Chair*: Alexandre Vieira			
	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 Elastoplasticity Problems with Finite Deformations
Th 3:15pm-4:45pm 2x30 min	**Theory and Methods for ODE- and PDE-Constrained Optimization 2**, *Chair*: Johann Schmitt			
	Johann Schmitt, Optimal boundary control of hyperbolic balance laws with state constraints	Paloma Schäfer Aguilar, Numerical approximation of optimal control problems for conservation laws		
Th 5:00pm-6:30pm 4x20 min	**Recent Advances in Conic Programming III**, *Organizer*: Masakazu Muramatsu			
	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
Fr 8:30am-10:30am 3x30 min	**Optimal Control in Engineering Applications**, *Chair*: Maxime Grangereau			
		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
Fr 5:00pm-6:30pm 3x30 min	**Computer-assisted analyses of optimization algorithms II**, *Organizer*: Adrien Taylor			
	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 23 - Build G - 3rd floor - Zone 6

Room				
Mo 3:15pm-4:45pm 3x30 min	**Combinatorial Optimization in Chip Design**, *Organizer*: Stefan Hougardy			
	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	
Mo 5:00pm-6:30pm 3x30 min	**Novel data-driven OR techniques for power system operations and planning**, *Organizer*: Juan M. Morales			
	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	
Tu 8:30am-10:30am 4x30 min	**Electric Vehicles and Decarbonization**, *Chair*: Martim Joyce-Moniz			
	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
Tu 3:15pm-4:45pm 3x30 min	**Supply Chain and Lot Sizing**, *Chair*: Simon Thevenin			
	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	
We 8:30am-10:30am 4x30 min	**Energy-aware planning and scheduling 1**, *Organizer*: Sandra U. Ngueveu			
	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
We 3:15pm-4:45pm 3x30 min	**Conic Optimization and Power Systems**, *Organizer*: Jakub Marecek			
	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	
We 5:00pm-6:30pm 3x30 min	**Energy Market Models**, *Chair*: Sauleh A Siddiqui			
	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	
Th 8:30am-10:30am 4x30 min	**Unit Commitment Problem and Applications**, *Organizer*: Tiziano Parriani			
	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
Th 3:15pm-4:45pm 3x30 min	**Progress in Algorithms for Optimal Power Flow Problems II**, *Chair*: Miguel F Anjos			
	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	
Th 5:00pm-6:30pm 3x30 min	**Gas Network and Market Optimization**, *Organizer*: Jonas Schweiger			
	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	
Fr 8:30am-10:30am 3x30 min	**Scheduling Applications**, *Chair*: Mauricio C. de Souza			
		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
Fr 3:15pm-4:45pm 3x30 min	**Optimization for Energy System Planning**, *Chair*: Andrew Lu Liu			
	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	
Fr 5:00pm-6:30pm 3x30 min	**Energy-aware planning and scheduling 2**, *Organizer*: Christian Artigues			
	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	

Room	Salle 21 - Build G - Intermediate - Zone 6			
Mo 3:15pm-4:45pm 3x30 min	**Mixed-integer derivative-free optimization**, *Chair*: Clément Royer			
	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	
Mo 5:00pm-6:30pm 3x30 min	**Advances in DFO I**, *Chair*: Sébastien Le Digabel			
	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	
Tu 8:30am-10:30am 4x30 min	**Bayesian and Randomized Optimization II**, *Chair*: Youssef Diouane			
	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
Tu 3:15pm-4:45pm 3x30 min	**Advances in DFO II**, *Chair*: Warren Hare			
	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	
We 8:30am-10:30am 4x30 min	**New derivative-free algorithms**, *Chair*: Margherita Porcelli			
	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
We 3:15pm-4:45pm 3x30 min	**Surrogate-based algorithms for constrained derivative-free problems**, *Chair*: Phillipe R. Sampaio			
	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	
We 5:00pm-6:30pm 3x30 min	**Progress in methods and theory of derivative-free optimization**, *Chair*: Serge Gratton			
	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	
Th 8:30am-10:30am 4x30 min	**Bayesian and Randomized Optimization I**, *Chair*: Stefan M Wild			
	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
Th 5:00pm-6:30pm 3x30 min	**Advances in DFO III**, *Chair*: Juan C Meza			
	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	
Fr 8:30am-10:30am 4x30 min	**Challenging applications in DFO**, *Chair*: Francesco Rinaldi			
	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
Fr 3:15pm-4:45pm 3x30 min	**Advances in DFO IV**, *Chair*: Katya Scheinberg			
	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	
Fr 5:00pm-6:30pm 2x30 min	**Derivative-free global optimization algorithms**, *Chair*: Zaikun Zhang			
	LIMENG LIU, Optimization with global surrogate and trust-region assisted local search	ANNE AUGER, Benchmarking Bayesian, Derivative-Free, and Stochastic Blackbox Algorithms		

Room	Salle 20 - Build G - 1st floor - Zone 6			
Mo 3:15pm-4:45pm 3x30 min	**Using SDP relaxations and solving them faster**, *Organizer*: Elisabeth Gaar			
	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	
Mo 5:00pm-6:30pm 3x30 min	**Solving large scale convex composite programming**, *Organizer*: Kim-Chuan Toh			
	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	
Tu 8:30am-10:30am 4x30 min	**Algebraic and geometric aspects of semidefinite programming**, *Organizer*: Hamza Fawzi			
	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
Tu 3:15pm-4:45pm 3x30 min	**Recent Advances in Conic Programming I**, *Organizer*: Makoto Yamashita			
	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	
We 8:30am-10:30am 4x30 min	**Theory and algorithms in conic linear programming 2**, *Organizer*: Gabor Pataki			
	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
We 3:15pm-4:45pm 3x30 min	**SDP approaches to combinatorial and global optimization problems**, *Organizer*: Etienne De Klerk			
	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	
We 5:00pm-6:30pm 3x30 min	**Noncommutative polynomial optimization: semidefinite relaxations, free convexity and applications to quantum information I**, *Organizer*: Monique Laurent			
	Markus Schweighofer, Inclusion of spectrahedra, free spectrahedra and coin tossing	Tom-Lukas Kriel, Matrix convex sets and matrix extreme points	Janez Povh, Extracting optimisers by non-commutative GNS construction is robust	
Th 8:30am-10:30am 4x30 min	**Computer-assisted analyses of optimization algorithms I**, *Organizer*: Adrien Taylor			
	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
Th 5:00pm-6:30pm 4x20 min	**Global Optimization 3**, *Chair*: Jean-Baptist Hiriart-Urruty			
	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
Fr 8:30am-10:30am 4x30 min	**Copositive and completely positive optimization**, *Organizer*: Olga Kuryatnikova			
	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
Fr 3:15pm-4:45pm 3x30 min	**Global Optimization 2**, *Chair*: Mirjam Duer			
	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	
Fr 5:00pm-6:30pm 3x30 min	**Global Optimization 1**, *Chair*: Jean-Baptist Hiriart-Urruty			
	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	

Room	Salle 24 - Build G - 3rd floor - Zone 6			
Mo 3:15pm-4:45pm 3x30 min	**Topics in power systems**, *Organizer*: Alberto J Lamadrid			
	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	
Mo 5:00pm-6:30pm 3x30 min	**Structure and Learning in Power Grid Optimization**, *Organizer*: Deepjyoti Deka			
	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	
Tu 8:30am-10:30am 4x30 min	**Risk Models for Electricity Markets**, *Chair*: Michael C Ferris			
	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
Tu 3:15pm-4:45pm 3x30 min	**Optimization Models for Renewable Energy Integration 2**, *Chair*: Michel Denault			
	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	
We 8:30am-10:30am 4x30 min	**Distribution and Demand Flexibility**, *Chair*: Golbon Zakeri			
	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
We 3:15pm-4:45pm 2x30 min	**Emerging Energy Markets**, *Organizer*: Dennice F. Gayme			
	Maryam Kamgarpour, Designing coalition-proof mechanisms - the case of electricity markets	Sean Meyn, Irrational Agents and the Power Grid		
We 5:00pm-6:30pm 4x20 min	**Location and Routing**, *Chair*: Mustapha Oudani			
	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
Th 8:30am-10:30am 4x30 min	**Mining Applications**, *Organizer*: Alexandra M Newman			
	Marcos Goycoolea, Lane's Algorithm Revisited	Peter Malkin, A MILP-based approach for loader assignment in open pit scheduling	Levente Sipeki, Optimal Selection of Support Pillars in an Underground Mine	Alexandra Newman, Mathematical Methods for Complex Underground Design and Scheduling Problems
Th 3:15pm-4:45pm 3x30 min	**Electricity Generation Scheduling and Dispatch**, *Chair*: Christophe Duhamel			
	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	
Th 5:00pm-6:30pm 3x20 min	**Vehicle Routing III**, *Chair*: Raquel Bernardino			
	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	
Fr 8:30am-10:30am 3x30 min	**Power Systems Models with Discrete Decision Variables**, *Organizer*: Adolfo R Escobedo			
		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
Fr 3:15pm-4:45pm 3x30 min	**Vehicle Routing II**, *Chair*: Chris N Potts			
	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	
Fr 5:00pm-6:30pm 3x20 min	**Stochastic Methods for Energy Optimization**, *Chair*: Tristan Rigaut			
	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	

Room	Salle 18 - Build I - 1st floor - Zone 7			
Mo 3:15pm-4:45pm 3x30 min	**Advances in Linear, Non Linear and Mixed-Integer Optimization**, *Chair*: Hiroshige Dan			
	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	
Mo 5:00pm-6:30pm 4x20 min	**Manufacturing**, *Chair*: Younsoo Lee			
	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
Tu 8:30am-10:30am 4x30 min	**Path and tree problems**, *Chair*: Arthur J Delarue			
	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
Tu 3:15pm-4:45pm 3x30 min	**Optimization software and applications**, *Chair*: Bartolomeo Stellato			
	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	
We 8:30am-10:30am 4x30 min	**Robust network optimization**, *Organizer*: Dimitri Papadimitriou			
	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 Multilevel Facility Location Problem (MFLP)
We 3:15pm-4:45pm 3x30 min	**Scheduling in Networks**, *Chair*: Hamish Waterer			
	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	
We 5:00pm-6:30pm 3x20 min	**Machine Scheduling 2**, *Chair*: Guopeng Song			
	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	
Th 8:30am-10:30am 3x30 min	**High-Performance Computing in Optimization I**, *Organizer*: Kibaek Kim			
		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
Th 3:15pm-4:45pm 3x30 min	**Production Planning**, *Chair*: Michel Siemon			
	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	
Th 5:00pm-6:30pm 4x20 min	**Supply Chain**, *Chair*: Daniel Ramón-Lumbierres			
	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
Fr 8:30am-10:30am 4x30 min	**Telecommunications**, *Organizer*: Edoardo Amaldi			
	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
Fr 3:15pm-4:45pm 3x30 min	**Machine Scheduling 1**, *Chair*: Renan S. Trindade			
	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	
Fr 5:00pm-6:30pm 4x20 min	**Transportation networks**, *Chair*: Bernard Gendron			
	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

Room	Salle 16 - Build I - 2nd floor - Zone 7			
Mo 3:15pm-4:45pm 3x30 min	**Decisions and learning from data**, *Chair*: Christopher McCord			
	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	
Mo 5:00pm-6:30pm 3x20 min	**Packing and Capacity Management**, *Chair*: Eugene Zak			
	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	
Tu 8:30am-10:30am 3x30 min	**Facility Location**, *Chair*: Ivan Contreras			
		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
Tu 3:15pm-4:45pm 3x30 min	**Distributed and Asynchronous Learning**, *Organizer*: Ion Necoara			
	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	
We 8:30am-10:30am 3x30 min	**First-Order Methods for Machine Learning**, *Organizer*: Fabian Pedregosa			
		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
We 3:15pm-4:45pm 3x30 min	**Rail and Maritime Transportation**, *Chair*: Kazuhiro Kobayashi			
	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	
We 5:00pm-6:30pm 3x20 min	**Production-Routing**, *Chair*: Feng Gao			
	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	
Th 8:30am-10:30am 4x30 min	**Dynamical systems, control and optimization**, *Chair*: Benjamin Recht			
	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
Th 3:15pm-4:45pm 3x30 min	**Robust first order methods**, *Organizer*: Fatma Kilinc-Karzan			
	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	
Th 5:00pm-6:30pm 4x20 min	**Advances in Reinforcement Learning Algorithms**, *Organizer*: Lin Xiao			
	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
Fr 8:30am-10:30am 4x30 min	**Dealing with non-convexity**, *Chair*: Damek Davis			
	Leonard Berrada, Smoothing Piecewise Linear Loss Functions for Deep Learning	Damek Davis, Convergence rates of stochastic methods for nonsmooth nonconvex problems	Cong Ma, Implicit Regularization in Nonconvex Statistical Estimation	Naoki Marumo, Provable Convex Minimization under Non-convex Submodular-structured Sparsity
Fr 3:15pm-4:45pm 3x30 min	**Discrete methods for data centers and graphs**, *Organizer*: Aaron Archer			
	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	
Fr 5:00pm-6:30pm 2x20 min	**Logistics Networks**, *Chair*: El Hassan Laaziz			
	Yasushi Narushima, Robust supply chain network equilibrium model with random demands	Guillaume Marques, Method Benchmarking for Two-Echelon Capacitated Vehicle Routing		

Room	Salle LA4 - Build L - Basement - Zone 8			
Mo 3:15pm-4:45pm 3x30 min	**Portfolio Optimization**, *Chair*: Bernardo K. Pagnoncelli 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	
Mo 5:00pm-6:30pm 3x30 min	**Structure from evidence**, *Organizer*: Peter Gritzmann 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	
Tu 8:30am-10:30am 4x30 min	**Interval Global Optimization**, *Organizer*: Frederic Messine 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
Tu 3:15pm-4:45pm 3x30 min	**Optimization in Medicine**, *Organizer*: Sebastian Sager 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	
We 8:30am-10:30am 3x30 min	**Energy markets**, *Organizer*: Martine Labbé	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
We 3:15pm-4:45pm 3x30 min	**Air Transportation and Air Traffic Management**, *Organizer*: Sonia Cafieri 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	
We 5:00pm-6:30pm 3x30 min	**Resource-constrained assignment and scheduling**, *Organizer*: Fabian Bastin 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	
Th 8:30am-10:30am 4x30 min	**Multi-commodity flows**, *Organizer*: Ralf Borndörfer 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
Th 3:15pm-4:45pm 3x30 min	**Inverse Problems in Physics**, *Chair*: Leo Liberti 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	
Th 5:00pm-6:30pm 4x20 min	**Medicine and Metabolic engineering**, *Chair*: Mahdi Doostmohammadi 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
Fr 8:30am-10:30am 3x30 min	**Finance and Portfolio Optimization**, *Organizer*: Asaf Shupo	Benjamin Heymann, Auction under ROI constraints	Gabriela Kovacova, Time Consistency of the Mean-Risk Problem	Asaf Shupo, Building Optimal Strategies Using Multi-Objective Optimization
Fr 3:15pm-4:45pm 3x30 min	**Industrial dynamics and Environmental policy**, *Organizer*: Inmaculada Garcia Fernandez 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	
Fr 5:00pm-6:30pm 4x20 min	**Optimization and Game Theory**, *Organizer*: Veerle Timmermans 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

Room	Salle ARNOZAN - Build Q - Ground Floor - Zone 8			
Mo 3:15pm-4:45pm 3x30 min	**Algorithms for optimization and variational problems with possibly nonisolated solutions I**, *Organizer*: Andreas Fischer			
	Nico Strasdat, A special complementarity function revisited	Alexey Izmailov, Critical solutions of non-linear equations: attraction for Newton-type methods	Andreas Fischer, Local attraction of Newton methods to critical solutions of constrained systems	
Mo 5:00pm-6:30pm 4x20 min	**Variational Analysis 4**, *Organizer*: Jo A. Brueggemann			
	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
Tu 8:30am-10:30am 4x30 min	**Optmization Algorithms and Variational Inequalites I**, *Organizer*: Bo Jiang			
	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
We 8:30am-10:30am 4x30 min	**Variational Analysis 1**, *Organizer*: Samir Adly			
	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.
We 3:15pm-4:45pm 3x30 min	**Nash equilibrium and games 1**, *Organizer*: Lorenzo Lampariello			
	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	
We 5:00pm-6:30pm 3x30 min	**Interior Point Methods in LP and NLP**, *Chair*: Andre L Tits			
	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	
Th 8:30am-10:30am 4x30 min	**First-order methods: advances and applications**, *Organizer*: Immanuel M. Bomze			
	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	Michel Kahr, Robust StQP, first-order methods, and applications in social network analysis	Mathias Staudigl, On the convergence of projection free Hessian Barrier-Gradient Algorithms
Th 5:00pm-6:30pm 4x20 min	**Variational Analysis 5**, *Organizer*: David Sossa			
	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
Fr 8:30am-10:30am 4x30 min	**Variational Analysis 3**, *Organizer*: Johanna Burtscheidt			
	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
Fr 3:15pm-4:45pm 3x30 min	**Nash equilibrium and Games 2**, *Organizer*: Giancarlo Bigi			
	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	
Fr 5:00pm-6:30pm 4x20 min	**Variational Analysis 2**, *Organizer*: David Salas			
	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

FABRE - Build J - Ground Floor - Zone 8

Room				
Mo 3:15pm-4:45pm 3x30 min	**Distributed Optimization**, *Organizer*: Franck Iutzeler			
	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	
Mo 5:00pm-6:30pm 4x20 min	**Riemannian geometry in optimization for learning**, *Organizer*: Nicolas Boumal			
	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
Tu 8:30am-10:30am 4x30 min	**Optimization in Statistical Learning**, *Organizer*: Quentin Berthet			
	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
Tu 3:15pm-4:45pm 3x30 min	**Advances in large-scale machine learning**, *Organizer*: Mark Schmidt			
	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	
We 8:30am-10:30am 4x30 min	**Structured Optimization for Machine Learning and Signal Processing**, *Organizer*: Lin Xiao			
	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
We 3:15pm-4:45pm 3x30 min	**Convex optimization, distances and constraints**, *Chair*: Pablo A Parrilo			
	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	
We 5:00pm-6:30pm 3x30 min	**Problems in the intersection of machine learning and optimization**, *Chair*: Ross M Anderson			
	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	
Th 8:30am-10:30am 4x30 min	**First-order methods for large-scale convex problems**, *Organizer*: Stephen A Vavasis			
	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
Th 3:15pm-4:45pm 3x30 min	**Accelerating Learning**, *Organizer*: Martin Takac			
	Damien Scieur, Nonlinear Acceleration of Stochastic Algorithms	Sai Praneeth Karimireddy, Accelerated First Order Methods with Approximate Subproblems	Angelia Nedich, Optimal Algorithms for Distributed Optimization	
Th 5:00pm-6:30pm 4x20 min	**First-order methods for large-scale convex problems II**, *Organizer*: Stephen A Vavasis			
	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
Fr 8:30am-10:30am 3x30 min	**Dimensionality reduction tools for learning: A sketchy session**, *Organizer*: Robert M Gower			
		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
Fr 3:15pm-4:45pm 3x30 min	**Classification, regression and clustering**, *Chair*: Dimitris Bertsimas			
	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	
Fr 5:00pm-6:30pm 4x20 min	**Spectral and Semidefinite Methods for Learning**, *Organizer*: Martin Jaggi			
	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

Room	Salle DENUCE - Build Q - Ground Floor - Zone 8			
Mo 3:15pm-4:45pm 3x30 min	**Progress in Algorithms for Optimal Power Flow Problems I**, *Organizer*: Miguel F Anjos			
	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	
Mo 5:00pm-6:30pm 4x20 min	**Exploiting structure in constrained optimization**, *Organizer*: Mihai Cucuringu			
	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
Tu 8:30am-10:30am 4x30 min	**Statistics meets optimization: going beyond convexity**, *Organizer*: John Duchi			
	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
Tu 3:15pm-4:45pm 3x30 min	**Equilibrium Modelling in Energy**, *Organizer*: Thomas Kallabis			
	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	
We 8:30am-10:30am 4x30 min	**Decomposition Techniques to Solve Large-Scale Optimization Problems for Electricity and Natural Gas Systems**, *Organizer*: Ramteen Sioshansi			
	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
We 3:15pm-4:45pm 3x30 min	**Second order methods for training ML models**, *Chair*: Julien Mairal			
	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	
We 5:00pm-6:30pm 4x20 min	**Optimization and modeling of integrated energy systems**, *Organizer*: Jalal Kazempour			
	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
Th 8:30am-10:30am 4x30 min	**Large-scale learning**, *Organizer*: Lorenzo Rosasco			
	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
Th 3:15pm-4:45pm 3x30 min	**Optimization Models for Renewable Energy Integration 1**, *Organizer*: Luis F Zuluaga			
	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	
Th 5:00pm-6:30pm 3x30 min	**Equilibrium and Optimization in Energy Markets**, *Organizer*: Asgeir Tomasgard			
	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	
Fr 8:30am-10:30am 4x30 min	**Machine Learning in State Estimation and Situational Awareness in Power Grids**, *Organizer*: Deepjyoti Deka			
	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
Fr 3:15pm-4:45pm 3x30 min	**Estimation and Learning for Power Systems**, *Organizer*: Javad Lavaei			
	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	

Room	PITRES - Build O - Ground Floor - Zone 8			
Mo 3:15pm-4:45pm 3x30 min	**Facility Layout**, *Chair*: Anders N Gullhav			
	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	
Mo 5:00pm-6:30pm 3x30 min	**Implementation of interior-point methods for large-scale problems and applications II**, *Organizer*: Jordi Castro			
	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	
Tu 8:30am-10:30am 4x30 min	**LP, Mixed Integer Convex Programming and Decomposition**, *Organizer*: Thorsten Koch			
	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
Tu 3:15pm-4:45pm 3x30 min	**Pricing Methods**, *Organizer*: Rafael Martinelli			
	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	
We 8:30am-10:30am 3x30 min	**Progress in MIP Solvers I**, *Organizer*: Michael Winkler			
		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
We 3:15pm-4:45pm 3x30 min	**Progress in Conic and MIP Solvers**, *Organizer*: Imre Polik			
	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	
We 5:00pm-6:30pm 3x30 min	**Progress in MIP Solvers II**, *Organizer*: Hans Mittelmann			
	ANDREA TRAMONTANI, Benders Decomposition in IBM CPLEX	MICHAEL WINKLER, Gurobi 8.0 - What's new	MICHAEL PERREGAARD, Recent Progress in the Xpress Solvers	
Th 8:30am-10:30am 3x30 min	**Vehicle Routing I**, *Chair*: Guy Desaulniers			
		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
Th 3:15pm-4:45pm 2x30 min	**Path Problems**, *Chair*: Yanchao Liu			
	EDWARD HE, Dynamic Discretization Discovery Algorithms for Time-Dependent Path Problems	YANCHAO LIU, Drone Path Planning and Aerial Traffic Flow		
Th 5:00pm-6:30pm 3x30 min	**Computational OR in Julia/JuMP**, *Organizer*: Miles Lubin			
	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	
Fr 8:30am-10:30am 4x30 min	**Hybrid Algorithms and Matheuristics for VRP**, *Organizer*: Thibaut Vidal			
	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
Fr 3:15pm-4:45pm 3x30 min	**Computational Integer Programming I**, *Organizer*: Domenico Salvagnin			
	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	
Fr 5:00pm-6:30pm 3x30 min	**Computational Integer Programming II**, *Organizer*: Domenico Salvagnin			
	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	

Room	GINTRAC - Build Q - Ground Floor - Zone 8			
Mo 3:15pm-4:45pm 3x30 min	**Polynomial and tensor optimization I**, *Organizer*: Jiawang Nie			
	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	
Mo 5:00pm-6:30pm 3x30 min	**Gradient Methods for Constrained Optimization Problems**, *Organizer*: Igor Konnov			
	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	
Tu 8:30am-10:30am 4x30 min	**Stochastic and Nonlinear Optimization I**, *Organizer*: Jorge Nocedal			
	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
Tu 3:15pm-4:45pm 3x30 min	**Sum-of-squares and moment problems: methods and applications**, *Organizer*: Etienne De Klerk			
	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	
We 8:30am-10:30am 4x30 min	**Stochastic and Nonlinear Optimization III**, *Organizer*: Jorge Nocedal			
	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
We 3:15pm-4:45pm 3x30 min	**The power and limits of the Lasserre hierarchy**, *Organizer*: Markus Schweighofer			
	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	
We 5:00pm-6:30pm 3x30 min	**Software for Nonlinear Optimization**, *Organizer*: Sven Leyffer			
	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	
Th 8:30am-10:30am 4x30 min	**Recent advances in interior point methods and NLP**, *Organizer*: Michael Todd			
	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
Fr 8:30am-10:30am 4x30 min	**Stochastic and Nonlinear Optimization II**, *Organizer*: Jorge Nocedal			
	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
Fr 3:15pm-4:45pm 3x30 min	**Interior Point Methods in Engineering Applications I**, *Organizer*: Jacek Gondzio			
	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	
Fr 5:00pm-6:30pm 3x30 min	**Moment relaxations for polynomial optimization with symmetries**, *Organizer*: Markus Schweighofer			
	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	

Room	Salle LC4 - Build L - Intermediate 1 - Zone 9			
Tu 8:30am-10:30am 4x30 min	**Advances in Bundle Methods for Convex Optimization**, *Organizer*: Christoph Helmberg			
	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
We 8:30am-10:30am 4x30 min	**Recent advances in first-order algorithms for non-smooth optimization**, *Organizer*: Thomas Pock			
	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
Th 8:30am-10:30am 4x30 min	**Universal methods in non-smooth analysis**, *Organizer*: Alexander Gasnikov			
	Alexander Tyurin, Universal Nesterov's gradient method in general model conception	Alexander Tytov, 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
Th 5:00pm-6:30pm 3x30 min	**Efficient Semismooth Newton Methods for Large Scale Statistical Optimization Problems**, *Organizer*: Defeng Sun			
	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	
Fr 8:30am-10:30am 4x30 min	**Geometry in complexity analysis of non-smooth optimization methods**, *Organizer*: Jalal Fadili			
	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
Fr 5:00pm-6:30pm 3x30 min	**Nonconvex Optimization: Theory and Methods - Part 3**, *Organizer*: Genaro Lopez			
	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?	

Room	Salle KC6 - Build K - Intermediate 1 - Zone 10			
Mo 3:15pm-4:45pm 3x30 min	**Coordinate Descent and Randomized Direct Search Methods**, *Organizer*: Martin Takac			
	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	
Mo 5:00pm-6:30pm 3x20 min	**Complexity of Randomized Algorithms**, *Organizer*: Raghu Pasupathy			
	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	
Tu 8:30am-10:30am 4x30 min	**Larges Scale and Distributed Optimization**, *Organizer*: Ermin Wei			
	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
Tu 3:15pm-4:45pm 3x30 min	**Recent Advances in Stochastic and Non-convex Optimization II**, *Organizer*: Mingyi Hong			
	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	
We 8:30am-10:30am 4x30 min	**First Order Methods for Non-Smooth Constrained Optimization**, *Organizer*: Qihang Lin			
	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
We 3:15pm-4:45pm 3x30 min	**Fast Converging Stochastic Optimization Algorithms**, *Organizer*: Francis Bach			
	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	
We 5:00pm-6:30pm 4x20 min	**Non-Convex and Second-order Methods in Machine Learning**, *Organizer*: Martin Takac			
	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
Th 8:30am-10:30am 4x30 min	**Recent Advances on Stochastic Algorithms and Machine Learning**, *Organizer*: Shiqian Ma			
	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
Th 3:15pm-4:45pm 3x30 min	**Asynchronous Parallel and Distributed Optimization**, *Organizer*: Wotao Yin			
	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	
Th 5:00pm-6:30pm 3x20 min	**Recent Progress on Second-order Type Optimization Methods**, *Organizer*: Andre Milzarek			
	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	
Fr 8:30am-10:30am 3x30 min	**Recent Advances in Coordinate Descent and Constrained Problems**, *Organizer*: Ion Necoara			
		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
Fr 5:00pm-6:30pm 4x20 min	**Algorithms for Structured Statistical Optimization**, *Chair*: Ilker Birbil			
	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

Room	Salle LC5 - Build L - Intermediate 1 - Zone 10			
Mo 3:15pm-4:45pm 3x30 min	**Algorithms for nonlinear conic problems**, *Chair*: Takayuki Okuno			
	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	
Mo 5:00pm-6:30pm 3x30 min	**Convergence and Approximation in Conic Programming**, *Chair*: Tamás Terlaky			
	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	
Tu 8:30am-10:30am 4x30 min	**Theory and algorithms in conic linear programming 1**, *Organizer*: Gabor Pataki			
	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
Tu 3:15pm-4:45pm 3x30 min	**Relative Entropy Optimization II**, *Organizer*: Venkat Chandrasekaran			
	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	
We 8:30am-10:30am 4x30 min	**New trends II**, *Chair*: Frank Permenter			
	Claudia Adams, An L^2-approach to Copositivity	Faizan Ahmed, On algorithms to optimize homogeneous polynomial over the simplex and the sphere	John Mitchell, Complementarity formulations of rank minimization problems	Frank Permenter, Interior-point methods via the exponential map
We 3:15pm-4:45pm 3x30 min	**Reformulation-based solution methods for quadratic programming**, *Organizer*: Dominique Quadri			
	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	
We 5:00pm-6:30pm 4x20 min	**Completely Positive Cones and Applications**, *Chair*: Patrick Groetzner			
	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
Th 8:30am-10:30am 4x30 min	**Geometry and duality in convex optimization**, *Organizer*: Javier F Pena			
	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
Th 3:15pm-4:45pm 3x30 min	**Noncommutative polynomial optimization: semidefinite relaxations, free convexity and applications to quantum information II**, *Organizer*: Monique Laurent			
	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	
Th 5:00pm-6:30pm 4x20 min	**Using coning programming in problems solving**, *Chair*: Kurt Majewski			
	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
Fr 8:30am-10:30am 4x30 min	**Stability and scaling in conic programming**, *Chair*: Diego Cifuentes			
	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
Fr 3:15pm-4:45pm 3x30 min	**Relative Entropy Optimization I**, *Organizer*: Venkat Chandrasekaran			
	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	
Fr 5:00pm-6:30pm 3x30 min	**Sparse Semidefinite Programming**, *Organizer*: Somayeh Sojoudi			
	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	

Room	Salle KC7 - Build K - Intermediate 2 - Zone 10			
Mo 3:15pm-4:45pm 3x30 min	**Sparse Recovery**, *Chair*: Mustafa C Pinar			
	John Chinneck, LP-based Sparse Solutions Revisited	Mustafa Pinar, Sparse Recovery and Convex Quadratic Splines	Olof Troeng, Efficient ℓ_0 Trend Filtering	
Tu 8:30am-10:30am 4x30 min	**Unconstrained Optimization**, *Chair*: Ekkehard Sachs			
	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
Tu 3:15pm-4:45pm 3x30 min	**Bridging NLP and Theoretical Computer Science**, *Organizer*: Aleksander Madry			
	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	
We 8:30am-10:30am 4x30 min	**Computational advances in NLP**, *Chair*: Jeffrey CH Pang			
	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
Th 8:30am-10:30am 4x30 min	**First Order Methods I**, *Chair*: Sandra A. Santos			
	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
Th 5:00pm-6:30pm 3x20 min	**First Order Methods II**, *Chair*: Guillaume Berger			
	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	
Fr 8:30am-10:30am 4x30 min	**Regularization and Iterative Methods in Large-Scale Optimization**, *Organizer*: Jacek Gondzio			
	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
Fr 5:00pm-6:30pm 3x30 min	**Subspace methods in NLP II**, *Organizer*: Panos Parpas			
	Panos Parpas, Distributed Subspace Decomposition	Emre Mengi, Subspace Frameworks for Eigenvalue Optimization	Jaroslav Fowkes, A block-coordinate Gauss-Newton method for nonlinear least squares	

Room	Salle 05 - Build Q - 1st floor - Zone 11			
Mo 3:15pm-4:45pm 3x30 min	**Convex regularization and inverse problems**, *Organizer*: Pierre Weiss			
	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	
Mo 5:00pm-6:30pm 4x20 min	**Polynomial and tensor optimization III**, *Organizer*: Jiawang Nie			
	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
Tu 8:30am-10:30am 4x30 min	**Machine learning and sparse optimisation** , *Organizer*: Coralia Cartis			
	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
Tu 3:15pm-4:45pm 2x30 min	**Interior Point Methods in Engineering Applications II**, *Organizer*: Jacek Gondzio			
	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		
We 8:30am-10:30am 4x30 min	**Optimality conditions in NLP and conic problems**, *Organizer*: Roberto Andreani			
	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
We 3:15pm-4:45pm 3x30 min	**Subspace methods in NLP I**, *Organizer*: Michal Kocvara			
	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	
We 5:00pm-6:30pm 3x30 min	**Conjugate Gradient Methods**, *Chair*: Giovanni Fasano			
	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	
Th 8:30am-10:30am 4x30 min	**Machine learning for optimisation**, *Organizer*: Coralia Cartis			
	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
Th 3:15pm-4:45pm 3x30 min	**Methods of Optimization in Riemannian Manifolds**, *Organizer*: Orizon P Ferreira			
	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	
Th 5:00pm-6:30pm 4x20 min	**Polynomial and tensor optimization II**, *Organizer*: Jiawang Nie			
	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
Fr 8:30am-10:30am 4x30 min	**First order methods**, *Organizer*: Gerardo Toraldo			
	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
Fr 3:15pm-4:45pm 3x30 min	**Nonlinear Optimization**, *Chair*: Marc C Steinbach			
	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	
Fr 5:00pm-6:30pm 4x20 min	**Primal-dual and ADMM algorithms for nonlinear programming**, *Organizer*: Marco Sciandrone			
	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

Room	Salle 06 - Build Q - 1st floor - Zone 11			
Mo 3:15pm-4:45pm 3x30 min	**Proximal Methods for Structured Problems**, *Organizer*: Ting Kei Pong			
	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	
Mo 5:00pm-6:30pm 4x20 min	**Nonlinear Optimization and Variational Inequalities VI**, *Organizer*: Cong Sun			
	Fengmin Xu, Balance analysis of sparsity and robustness for portfolio adjustment problem	Xiao Wang, Proximal Stochastic Quasi-Newton methods for Nonconvex Composite Optimization	Zhongming Wu, General inertial proximal gradient method for nonconvex nonsmooth optimization	
Tu 8:30am-10:30am 4x30 min	**Nonlinear Optimization and Variational Inequalities V**, *Organizer*: Xin Liu			
	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
Tu 3:15pm-4:45pm 3x30 min	**Nonlinear Optimization and Variational Inequalities III**, *Organizer*: Xin Liu			
	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	
We 8:30am-10:30am 2x30 min	**Stochastic Optimization and Variational Inequalities II**, *Organizer*: Alejandro R. Jofre			
			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
We 3:15pm-4:45pm 3x30 min	**Optimization Algorithms and Variational Inequalities II**, *Organizer*: Xiaoqi Yang			
	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	
We 5:00pm-6:30pm 3x30 min	**Complementarity Problems**, *Organizer*: Samir K. Neogy			
	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	
Th 8:30am-10:30am 4x30 min	**Nonlinear Optimization and Variational Inequalities I**, *Organizer*: Xin Liu			
	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
Th 3:15pm-4:45pm 3x30 min	**Nonlinear Optimization and Variational Inequalities II**, *Organizer*: Cong Sun			
	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	
Th 5:00pm-6:30pm 3x30 min	**VU-decomposition techniques for nonsmooth optimization**, *Organizer*: Claudia Sagastizabal			
	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	
Fr 8:30am-10:30am 4x30 min	**Stochastic Optimization and Variational Inequalites**, *Organizer*: Hailin Sun			
	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
Fr 3:15pm-4:45pm 3x30 min	**Algorithms for optimization and variational problems with possibly nonisolated solutions II**, *Organizer*: Alexey F. Izmailov			
	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	
Fr 5:00pm-6:30pm 3x30 min	**Nonlinear Optimization and Variational Inequalities IV**, *Organizer*: Cong Sun			
	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	

Room	Salle 9 - Build N - 4th floor - Zone 12			
Mo 3:15pm-4:45pm 2x30 min	**Adaptivity in non smooth optimization**, *Organizer*: Masaru Ito MASARU ITO, An adaptive first order method for weakly smooth and uniformly convex problems	SOMAYYA KOMAL, A Subgradient Algorithm for solving variational Inequality Problem		
Mo 5:00pm-6:30pm 3x20 min	**Modeling in NLP**, *Chair*: Laura Balzano 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	
Tu 3:15pm-4:45pm 3x30 min	**Linear Optimization III**, *Chair*: Rodrigo Mendoza Smith 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	
We 8:30am-10:30am 4x30 min	**Fixed Point Approaches**, *Chair*: Poom Kumam 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
We 3:15pm-4:45pm 3x30 min	**Quadratic Optimization**, *Chair*: Anders Forsgren 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	
We 5:00pm-6:30pm 3x30 min	**Linear Optimization II**, *Chair*: Julian Hall 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	
Th 8:30am-10:30am 4x30 min	**Non smooth optimization for lage scale poblems**, *Organizer*: Yu Du 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
Th 5:00pm-6:30pm 4x20 min	**Large-scale combinatorial optimization implementations**, *Organizer*: Aaron Archer 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
Fr 8:30am-10:30am 4x30 min	**Decomposition Methods**, *Chair*: Roger Behling 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
Fr 5:00pm-6:30pm 3x20 min	**Linear Optimization I**, *Chair*: Jianming Shi 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	

Room	Salle 8 - Build N - 4th floor - Zone 12			
Mo 3:15pm-4:45pm 3x30 min	**Nonconvex Optimization: Theory and Methods - Part 1**, *Organizer*: Shoham Sabach			
	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	
Mo 5:00pm-6:30pm 3x30 min	**Extending the Reach of First-Order Methods, Part I**, *Organizer*: Haihao Lu			
	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	
Tu 8:30am-10:30am 4x30 min	**Addressing problems with complex geometries**, *Organizer*: Edouard Pauwels			
	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
Tu 3:15pm-4:45pm 3x30 min	**Nonconvex Optimization: Theory and Methods - Part 2**, *Organizer*: Russell Luke			
	GUOYIN LI, Splitting methods for nonconvex feasibility problems	PATRICK JOHNSTONE, Projective Splitting with Forward Steps	RUSSELL LUKE, Convergence Analysis for Nonconvex Optimization Made Easy	
We 8:30am-10:30am 4x30 min	**Dynamical Systems and Optimization**, *Organizer*: Hedy Attouch			
	RADU IOAN BOT, The continuous proximal-gradient approach in the nonconvex setting	ALEXANDRE CABOT, Accelerated Forward-Backward Algorithms	JUAN PEYPOUQUET, Inertial proximal algorithms for maximally monotone operators	SILVIA VILLA, A dual diagonal iterative regularization method
We 3:15pm-4:45pm 3x30 min	**Adaptivity in non-smooth optimization**, *Organizer*: Volkan Cevher			
	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	
We 5:00pm-6:30pm 3x30 min	**Methods and Analysis for Nonsmooth Optimization**, *Organizer*: Michael L Overton			
	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	
Th 8:30am-10:30am 4x30 min	**First-order methods for nonconvex and pathological convex problems**, *Organizer*: Wotao Yin			
	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
Th 3:15pm-4:45pm 3x30 min	**Extending the Reach of First-Order Methods, Part II**, *Organizer*: Robert M. Freund			
	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	
Th 5:00pm-6:30pm 3x30 min	**Different faces of nonsmoothness in optimization**, *Organizer*: Tim Hoheisel			
	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	
Fr 8:30am-10:30am 4x30 min	**Convergence analysis for non smooth optimization**, *Organizer*: Robert Csetnek			
	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
Fr 3:15pm-4:45pm 3x30 min	**Advances in the first-order methods for convex optimization**, *Organizer*: Angelia Nedich			
	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	
Fr 5:00pm-6:30pm 3x30 min	**Nonsmooth DC optimization with applications**, *Chair*: Napsu Karmitsa			
	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	

Room	Auditorium - Build Symph H - Gambetta - Zone 0			
Mo 11:00am-12:00am 1x60 min	**On the relationship between machine learning and optimization**, *Organizer*: Michel Goemans			
	Francis Bach, On the relationship between machine learning and optimization			
Mo 1:30pm-2:30pm 1x60 min	**Multiobjective Optimization with PDE Constraints**, *Organizer*: Stephen J Wright			
	Michael Hintermüller, Multiobjective Optimization with PDE Constraints			
Tu 11:00am-12:00am 1x60 min	**Adaptive Robust Optimization with Scenario-wise Ambiguity Sets**, *Organizer*: Daniel Kuhn			
	Melvyn Sim, Adaptive Robust Optimization with Scenario-wise Ambiguity Sets			
Tu 1:30pm-2:30pm 1x60 min	**The Resurgence of Proximal Methods in Optimization**, *Organizer*: Claudia Sagastizabal			
	Marc Teboulle, The resurgence of proximal methods in optimization			
We 11:00am-12:00am 1x60 min	**Insights via volumetric comparison of polyhedral relaxations**, *Organizer*: Andrea Lodi			
	Jon Lee, Insights via volumetric comparison of polyhedral relaxations			
We 1:30pm-2:30pm 1x60 min	**Relaxations and Approximations of Chance Constraints**, *Organizer*: Simge Kucukyavuz			
	Shabbir Ahmed, Relaxations and Approximations of Chance Constraints			
Th 11:00am-12:00am 1x60 min	**The BARON software for MINLP**, *Organizer*: Claudia D Ambrosio			
	Nikolaos Sahinidis, The BARON software for MINLP			
Th 1:30pm-2:30pm 1x60 min	**Randomness, risk and electricity prices**, *Organizer*: Michael C Ferris			
	Andy Philpott, Randomness, risk and electricity prices			
Fr 11:00am-12:00am 1x60 min	**Tseng Memorial Lectureship in Continuous Optimization**, *Organizer*: Yaxiang Yuan			
Fr 1:30pm-2:30pm 1x60 min	**Bounds for quantum graph parameters by conic and polynomial optimization**, *Organizer*: Frank Vallentin			
	Monique Laurent, Bounds for quantum graph parameters by conic and polynomial optimization			

Room	BROCA - Build W - 3rd floor - Zone 0			
Tu 11:00am-12:00am 1x60 min	**Lower bounds on the size of linear programs**, *Organizer*: Volker Kaibel THOMAS ROTHVOSS, Lower Bounds on the Size of Linear Programs			
We 11:00am-12:00am 1x60 min	**Monotone Operator Theory in Convex Optimization**, *Organizer*: Samir Adly PATRICK COMBETTES, Monotone Operator Theory in Convex Optimization			
Th 11:00am-12:00am 1x60 min	**Cutting Planes in the Extended Space**, *Organizer*: Adam N Letchford OKTAY GUNLUK, Cutting Planes in the Extended Space			
Fr 11:00am-12:00am 1x60 min	**Modern Branch-and-Cut Implementation**, *Organizer*: Marc E Pfetsch MATTEO FISCHETTI, Modern Branch-and-Cut Implementation			