



SOAK 2019

The Swedish Operations Research Conference
Blommenhof, Nyköping, 23-24 October 2019

Schedule

| | | Track A | Track B |
|-------|-------------|--|--|
| 23/10 | 10:00-11:00 | Coffee and registration | |
| | 11:00-11:15 | Welcome (room: Blåsippan) | |
| | 11:15-12:00 | Plenary session I. Thomas Schön, Uppsala University, "Constructing Stochastic Quasi-Newton Algorithms Using Gaussian Processes" (room: Blåsippan) | |
| | 12:00-12:10 | Photo session | |
| | 12:10-13:30 | Lunch | |
| | 13:30-15:25 | Session 1A (room: Blåsippan) <ol style="list-style-type: none"> Björn Morén, "Mathematical Optimization of Dose Planning of High Dose-Rate Brachytherapy – Challenges and Pitfalls of Modelling" Michelle Böck, "Toward Robust Optimization of Adaptive Radiation Therapy" Sara Frimodig, "Models for Radiation Therapy Patient Scheduling" Stella Riad, "Inverse Planning in Radiosurgery" David Tilly, "Probabilistic Optimization of the Percentile Dosage in Radiotherapy" | Session 1B (room: Gullvivan) <ol style="list-style-type: none"> Jo Devriendt, "Learn to Relax: Leveraging Integer Linear Programming for Conflict-Driven Search" Biressaw C. Wolde, "A Steepest Feasible Direction Extension of the Simplex Method" Uledi Ngulo, "A Dissection of the Duality Gap of Set Covering Problems" Elina Rönnberg, "An Integer Optimality Condition for Column Generation on Binary Linear Programs" David Ek, "Approximate Solution of System of Equations Arising in Interior-Point Methods for Bound-Constrained Optimization" |
| | 15:25-16:00 | Coffee | |
| | 16:00-17:30 | Session 2A (room: Blåsippan) <ol style="list-style-type: none"> Tobias Andersson Granberg, "Quantitative Evaluation of New First Response Initiatives in Emergency Services" Niki Matinrad, "Modelling Uncertain Task Compliance in the Dispatch of Volunteers to Out-Of-Hospital Cardiac Arrest Patients" Anna-Maria Grönbäck, "Effekten av tourniquetplaceringar vid en större skadehändelse" Stephan Gocht, "On Division Versus Saturation in Pseudo-Boolean Solving" | Session 2B (room: Gullvivan) <ol style="list-style-type: none"> Mats Carlsson, "Mobile Phone Base Station Link Configuration" Gianpiero Canessa, "The Risk-Averse Ultimate Pit Problem" Shen Peng, "Rectangular Chance Constrained Geometric Optimization" Roghayeh Hajizadeh, "A Branch-And-Bound Heuristic for Snow Removal Problem" |
| | 18:30 | Conference dinner | |

| | | Track A | Track B |
|-------|-------------|--|--|
| 24/10 | 9:00-9:45 | Plenary session II. Arne Andersson, Coupa Software “Applying Mathematical Optimization to Sourcing” (room: Blåsippan) | |
| | 9:45-10:20 | Coffee | |
| | 10:20-12:15 | Session 3A (room: Blåsippan) <ol style="list-style-type: none"> Gabrijela Obradovic, “Simultaneous scheduling of preventive system maintenance and the maintenance workshop” Quanjiang Yu, “Optimal Maintenance of Wind Power Plants” Caroline Granfeldt, “Long-Term Investment Models for Large-Scale Integration of Wind Power in Europe” Ghafour Ahani, “Optimal Caching on the Edge” Jan Adriaan Elffers, “On-The-Fly Cardinality Detection” | Session 3B (room: Gullvivan) <ol style="list-style-type: none"> Mattias Grönkvist, “Quantum Computing for Airline Planning” Björn Thalén, “Teaming in Airline Pairing Optimization” Hannes Uppman, “Details of an Industrially Relevant Avionics Scheduling Problem” Emil Karlsson, “A Matheuristic Based on Adaptive Large Neighbourhood Search for Solving an Avionic Scheduling Problem” Alan Kinene, “The Tendering of Subsidised routes in Air Transportation: A Game Theoretic Approach” |
| | 12:15-13:30 | Lunch | |
| | 13:30-15:00 | Session 4A (room: Blåsippan) <ol style="list-style-type: none"> Kostja Siefen, “What’s New in Gurobi 9” Tomas Lidén, “Scheduling Railway Maintenance Together with Trains: Models and Results” Sara Gestrelus, “Timetable Quality from the Perspective of the Swedish Infrastructure Manager” Irfan Caner Kaya, “An optimization model for railway network design concerning switches” | Session 4B (room: Gullvivan) <ol style="list-style-type: none"> Edvin Åblad, “Tight Formulations for the Unrelated Parallel Machine Problem with Set Packing Constraints” Nils-Hassan Quttineh, “Modeling of a Rich Bin Packing Problem from Industry” Sunney Fotedar, “Mathematical Optimization of the Tactical Allocation of Machining Resources for an Efficient Capacity Utilization in Aerospace Component Manufacturing” Sabino Roselli, “On SMT Solvers and Job Shop Scheduling Problems” |
| | 15:00-15:30 | Coffee | |

