

Monday Morning

	Chair: Jiří Sgall		
9:10 – 10:10	Invited speaker: Yossi Azar <i>Fast approximation algorithms for submodular optimization problems</i>		
	Coffee		
	Track A Chair: Maxim Sviridenko	Track B Chair: Guochuan Zhang	Track C Chair: Frits Spieksma
10:50 – 11:10	Fabian Kuhn and Monaldo Mastrolilli <i>Vertex Cover in Graphs with Locally Few Colors and Precedence Constrained Scheduling with Few Predecessors</i>	Sheng Yu, Prudence W.H. Wong and Yinfeng Xu <i>Online Scheduling of Linear Deteriorating Jobs on Parallel Machines</i>	Stefan Heinz and Jens Schulz <i>Explanation Algorithms for Cumulative Scheduling</i>
11:15 – 11:35	Andreas Schranzhofer, Jian-Jia Chen and Lothar Thiele <i>Timing Predictability for Resource Sharing Multicore Systems - Challenges and Open Problems</i>	Jason A. D. Atkin, Edmund K. Burke and Stefan Ravizza <i>A Statistical Approach for Taxi Time Estimation at London Heathrow Airport</i>	Zdeněk Baumelt , Přemysl Šůcha and Zdeněk Hanzálek <i>A Genetic Algorithm for A Nurse Rerostering Problem</i>
11:40 – 12:00	Ruslan Sadykov and François Vanderbeck <i>Machine scheduling by column-and-row generation on the time-indexed formulation</i>	Csanád Imreh and Tamás Németh <i>Parameter learning in online scheduling algorithms</i>	Marjan van den Akker, Roland Ger-aerts, Han Hoogeveen and Corien Prins <i>Path planning in games</i>

Monday Afternoon

15:00	Coffee		
	Chair: Sanjoy Baruah		
15:30 – 16:00	Plenary talk: Vincenzo Bonifaci and Alberto Marchetti-Spaccamela <i>Feasibility Analysis of Sporadic Real-Time Multiprocessor Task Systems</i>		
16:00 – 16:30	Plenary talk: Elisabeth Günther , Marco Lübbecke and Rolf Möhring <i>Challenges in Scheduling when Planning the Ship Traffic on the Kiel Canal</i>		
	Track A	Track B	Track C
	Chair: Leah Epstein	Chair: Christoph Dürr	Chair: Sanjoy Baruah
16:45 – 17:05	Christophe Lent , Mathieu Liedloff, Ameer Soukhal and Vincent T'Kindt <i>Exponential-time algorithms for scheduling problems</i>	Florian Dahms , Katharina Beygang and Sven O. Krumke <i>Online algorithms and bounds for the Train Marshalling Problem</i>	Mohamed Marouf , Laurent George and Yves Sorel <i>Schedulability analysis for a combination of preemptive strict periodic tasks and sporadic tasks</i>
17:10 – 17:30	Vitaly Strusevich and Kabir Rustogi <i>Enhanced models of single machine scheduling with a deterioration effect and maintenance activities</i>	Sofie Coene and Frits Spieksma <i>The lockmaster's problem</i>	Enrico Bini <i>Mapping real-time applications over multiprocessors</i>
17:35 – 17:55	Tomáš Ebenlendr and Jiří Sgall <i>A lower bound on deterministic online algorithms for scheduling on related machines without preemption</i>	Wei Yu and Guochuan Zhang <i>Improved approximation algorithms for routing shop scheduling</i>	Philippe Thierry , Laurent George and Jean-François Hermant <i>Real-time scheduling analysis for ARINC-based virtualized systems</i>
18:00 – 18:20	Lukasz Jeż <i>One to Rule Them All: a General Randomized Algorithm for Buffer Management with Bounded Delay</i>	Grzegorz Pawlak , Mateusz Cichenski, Mateusz Jarus and Slawomir Walkowski <i>The road traffic model for the car factory logistics</i>	Liliana Cucu-Grosjean <i>Probabilistic analysis of periodic real-time tasks with random execution times on identical processors</i>

Tuesday Morning

	Chair: Rolf Möhring		
9:00 – 10:00	Invited speaker: Bert Zwart <i>Scheduling and queueing: Optimality under rare events and heavy loads</i>		
	Coffee		
	Track A Chair: Monaldo Mastrolilli	Track B Chair: Leah Epstein	Track C Chair: Chris Potts
10:40 – 11:00	Sebastián Marbán , Cyriel Rutten and Tjark Vredeveld <i>Learning in stochastic machine scheduling</i>	Marin Bougeret , Pierre-Francois Dutoit and Denis Trystram <i>Using oracles for the design of efficient approximation algorithms</i>	Stéphane Dauzère-Pérès , Sadia Azem and Riad Aggoune <i>A Column Generation Approach for the Job-Shop Scheduling Problem with Availability Constraints</i>
11:05 – 11:25	Rodrigo Carrasco , Garud Iyengar and Clifford Stein <i>Energy aware scheduling: minimizing total energy cost and completion time by α-points and α-speeds</i>	José Verschae and Andreas Wiese <i>On the Configuration-LP for Scheduling on Unrelated Machines</i>	Bastian Bludau and Karl-Heinz Küfer <i>A two-machine flow shop problem consisting of a discrete processor and a batch processor under uncertainty</i>
11:30 – 11:50	S. Anand, Naveen Garg and Nicole Megow <i>Meeting deadlines: How much speed suffices?</i>	Jessica Chang, Hal Gabow and Samir Khuller <i>Scheduling Jobs in Parallel for Energy Savings</i>	Tomáš Zajíček and Přemysl Šůcha <i>Accelerating a Flow Shop Scheduling Algorithm on the GPU</i>
11:55 – 12:15	S. Baruah, V. Bonifaci, G. D'Angelo, H. Li, A. Marchetti-Spaccamela, N. Megow and L. Stougie <i>Mixed-criticality scheduling</i>	Murat Firat, Cor Hurkens and Gerhard Woeginger <i>Vehicle refueling with limited resources</i>	M.S. Barketau, M.Y. Kovalyov, Maciej Machowiak and J. Węglarz <i>Scheduling malleable tasks with arbitrary processing speed functions</i>

Tuesday Afternoon

	Chair: Yossi Azar		
15:30 – 16:00	Plenary talk: Kirk Pruhs and Clifford Stein <i>How To Schedule When You Have To Buy Your Energy</i>		
16:00 – 16:30	Plenary talk: Richard Cole, José Correa , Vasilis Gkatzelis, Vahab Mirrokni and Neil Olver <i>Inner Product Spaces for MinSum Coordination Mechanisms</i>		
	Track A Chair: Frits Spieksma	Track B Chair: Maxim Sviridenko	Track C Chair: Guochuan Zhang
16:45 – 17:05	Leah Epstein and Elena Kleiman <i>On the quality and complexity of Pareto equilibria in the Job Scheduling Game</i>	Tao Li and Joel Wein <i>Allocating Resources in Clouds of Game Servers</i>	Karin Thörnblad , Michael Patriksson, Ann-Brith Strömberg and Torgny Almgren <i>Mathematical modelling of a real flexible job shop in aero engine component manufacturing</i>
17:10 – 17:30	Ruben Hoeksma and Marc Uetz <i>The Price of Anarchy for Related Machine Scheduling</i>	Joanna Berlińska and Maciej Drozdowski <i>Scheduling and performance of divisible MapReduce applications</i>	Aldar Dugarzhapov and Alexander Kononov <i>An exact polynomial time algorithm for the preemptive mixed shop problem with two unit operations per job</i>
17:35 – 17:55	Eyjólfur Ingi Ásgeirsson and Pradipta Mitra <i>Performance of Distributed Game Theoretic Algorithms for Single Slot Scheduling in Wireless Networks</i>	Zdeněk Hanzálek , Claire Hanen and Přemysl Šůcha <i>Cyclic Scheduling - New Application and Concept of Core Precedences</i>	Sergey Sevastyanov and Bertrand M.T. Lin <i>Efficient enumeration of optimal and approximate solutions of the two-machine flow-shop problem</i>
18:00 – 18:20	Thierry Garaix , Christian Artigues and Cyril Briand <i>Fast minimum float computation in activity networks under interval uncertainty</i>	Kan Fang, Nelson Uhan , Fu Zhao and John Sutherland <i>Flow Shop Scheduling for Sustainable Manufacturing</i>	Roman Čapek , Přemysl Šůcha and Zdeněk Hanzálek <i>Scheduling with Alternative Process Plans and the Total Weighted Tardiness Criterion</i>

Wednesday

	Chair: Jiří Sgall
9:00 – 10:00	Invited speaker: Roman Barták <i>Modelling and Solving Scheduling Problems using Constraint Programming</i>
	Coffee
	Chair: Clifford Stein
10:40 – 11:10	Plenary talk: Alexander Souza , Antonios Antoniadis, Falk Hüffner, Pascal Lenzner and Carsten Moldenhauer <i>Balanced Interval Coloring</i>
11:10 – 11:40	Plenary talk: Tim Nonner <i>Clique Clustering yields a PTAS for max-Coloring Interval Graphs</i>

Thursday Morning

	Chair: Kirk Pruhs		
9:00 – 10:00	Invited speaker: David Shmoys <i>Strong LP Formulations and Primal-Dual Approximation Algorithms</i>		
	Coffee		
	Track A Chair: Guochuan Zhang	Track B Chair: Sanjoy Baruah	Track C Chair: Christoph Dürr
10:40 – 11:00	Leah Epstein and Asaf Levin <i>An AFPTAS for due date scheduling with related machines of general costs</i>	Robert Davis <i>Quantifying the Sub-optimality of Uniprocessor Fixed Priority Scheduling</i>	Ammar Oulamara and Amour Soukhal <i>Scheduling serial batching machine with two competitive agents</i>
11:05 – 11:25	Klaus Jansen , Lars Prädel, Ulrich M. Schwarz and Ola Svensson <i>Faster approximation algorithms for scheduling with fixed jobs</i>	Gurulingesh Raravi , Björn Andersson and Konstantinos Bletsas <i>Intra-Type Migrative Scheduling of Implicit-Deadline Sporadic Tasks on Two-Type Heterogeneous Multiprocessor</i>	Frédéric Guinand, Amine Mahjoub and Eric Sanlaville <i>M machine scheduling under uncertainties on machine availabilities</i>
11:30 – 11:50	Alexander Grigoriev, Alexander Kononov and Maxim Sviridenko <i>Logarithmic-approximations for the relocation problem</i>	Sleman Saliba , Iiro Harjunkoski and Matteo Biondi <i>Production Optimization and Scheduling in a Steel Plant: Hot Rolling Mill</i>	Hana Rudová and Pavel Troubil <i>Media Streams Planning</i>
11:55 – 12:15	Neil Dobbs, Tomasz Nowicki, Maxim Sviridenko and Grzegorz Swirszcz <i>Approximating the Joint Replenishment Problem</i>	Vincenzo Bonifaci , Gianlorenzo D'Angelo, Alberto Marchetti-Spaccamela, Suzanne van der Ster and Leen Stougie <i>Mixed-criticality scheduling of sporadic task systems</i>	Trivikram Dokka , Ioannis Mourtos and Frits Spieksma <i>Fast separation algorithms for three-index assignment problems</i>

Thursday Afternoon

15:00	Coffee		
	Chair: Marc Uetz		
15:30 – 16:00	Plenary talk: Tobias Brunsch, Heiko Roeglin, Cyriel Rutten and Tjark Vredeveld <i>Smoothed performance guarantees of local optima for multiprocessor scheduling</i>		
16:00 – 16:30	Plenary talk: Natalia Shakhlevich <i>Divisible Load Scheduling to Minimize the Computation Time and Cost</i>		
	Track A Chair: Chris Potts	Track B Chair: Leah Epstein	Track C Chair: Monaldo Mastrolilli
16:45 – 17:05	Ralf Borndörfer, Guillaume Sagnol and Elmar Swarat <i>An Integrated Vehicle Routing and Duty Roster Planning of Toll Control Inspectors</i>	Dirk Briskorn and Malte Fliedner <i>The train positioning problem</i>	Tanujit Dey, David Phillips and Patrick Steele <i>Minimizing predicted air travel delay</i>
17:10 – 17:30	Cor Hurkens , Murat Firat and Alexandre Laugier <i>Stability in multi-skill workforce assignments: complexity analysis and stable assignments polytope</i>	Stanley P.Y. Fung, Chung Keung Poon and Duncan K.W. Yung <i>Online Scheduling of Unit-Length Intervals on Parallel Machines</i>	Yasmina Seddik , Christophe Gonzales and Safia Kedad-Sidhoum <i>Solving the one-machine scheduling problem with cumulative payoffs</i>
17:35 – 17:55	Marco Schulze and Jürgen Zimmermann <i>Scheduling of underground mining processes</i>	Clemens Thielen , Sven Krumke and Stephan Westphal <i>Interval Scheduling on Related Machines: Complexity and Online Algorithms</i>	Alexander Kozlov <i>To the conjecture on the minimum number of migrations in the optimal schedule for the $P_m - pmtn(delay=d) - C_{max}$ problem</i>
18:00 – 18:20	Dries Goossens and Frits Spieksma <i>Breaks, cuts, and patterns</i>	Denis Trystram, Frédéric Wagner , Haifeng Xu and Guochuan Zhang <i>New Lower Bounds for Online Multi-threaded Paging Problem</i>	Hesham Alfares and Ahmad Zaid <i>Particle swarm optimization algorithm for workforce job rotation scheduling</i>

Friday

	Chair: Rolf Möhring		
9:00 – 10:00	Invited speaker: Ralf Borndörfer <i>Scheduling problems and algorithms in traffic and transport</i>		
	Coffee		
	Track A	Chair: David Shmoys	
10:40 – 11:00	Leah Epstein and Asaf Levin		
	<i>Optimal robust algorithms for preemptive scheduling</i>		
11:05 – 11:25	Attila Benkő, György Dósa and Xin Han		
	<i>Reassignment models in online scheduling on two related machines</i>		
	Chair: Jiří Sgall		
11:30 – 12:00	Plenary talk: René Sitters <i>Efficient algorithms for average completion time scheduling</i>		
12:00 – 12:30	Plenary talk: Nikhil Bansal and Kirk Pruhs <i>The Geometry of Scheduling</i>		