

MAPSP 2007 Conference Program

Monday

08:00 Registration

09:00 Opening Session

09:30 Invited Talk

Nikhil Basal

Scheduling algorithms for power management

10:30 Coffee break

11:00 Plenary Talks (2*30 min)

Clifford Stein, Fei Li and Jay Sethuraman

Better online buffer management

Nicole Megow and Tjark Vredeveld

News on stochastic online scheduling - The preemptive case

12:00 Lunch

14:00 Regular Talks - Parallel Sessions 1

Track A (3*20 min.)

Tomáš Ebenlendr, Wojciech Jawor and Jiri Sgall

Optimal preemptive online scheduling for all speeds

Tobias Brueggemann, Johann Hurink, Tjark Vredeveld and Gerhard Woeginger

Worst-case analysis of the quality of very large-scale neighborhoods for minimizing makespan on identical machines

David Bunde

Power-aware scheduling for makespan

Track B (3*20 min.)

Matthieu Perotin, Carl Esswein and Patrick Martineau

High performance computing on commodity hardware

Gawiejnowicz Stanislaw, Kurc Wieslaw and Pankowska Lidia

Conjugate problems in time-dependent scheduling

Sergey Skinderev and Alexander Lazarev

The schemes finding of the approached decision for the problems of scheduling theory

15:00 Coffee break

15:30 Regular Talks - Parallel Sessions 2

Track A (4*20 min.)

Erhan Kozan and Robert Burdett

Effects of scheduling on railway capacity

Matthias Müller-Hannemann and Alexander Sonninkow

Non-approximability of just-in-time scheduling

Philippe Baptiste, Alexander Kononov and Maxim Sviridenko

New lower bound for the flow shop scheduling

Edmund Burke, Patrick De Causmaecker, Geert De Maere, Jeroen Mulder, Marc Paelinck and Greet Vanden Berghe

Memetic algorithms for multi-objective optimisation of robustness objectives in airline schedules

Track B (4*20 min.)

Eishi Chiba, Hiroshi Fujiwara and Toshihide Ibaraki

A new approach to approximate the collision probability in an automated production line

Ariff Md Ab Malik, Masri Ayob, Abdul Razak Hamdan, Salwani Abdullah, Graham Kendall, Edmund Burke and Rong Qu

A new model for an examination-room assignment problem

Nozha Zribi

Minimizing total tardiness in a job-shop problem under maintenance constraints

Emrah Ahi, Mine Caglar and Ozgur Ozkasap

Stepwise fair-share buffering underneath bio-inspired P2P data dissemination

16:50 End of talks

18:00 Dinner

Tuesday

09:00 Invited Talk

Martin Skutella

Scheduling flow in networks: Recent developments in dynamic flows

10:00 Coffee break

10:30 Plenary Talks (3*30 min)

Nicole Megow, Rolf H. Möhring and Jens Schulz

Turnaround scheduling in chemical manufacturing

Angel Eric, Evripidis Bampis, Fanny Pascual and Tchetgnia Alex-Ariel

On truthfulness and approximation in scheduling

Peter Korteweg, Alberto Marchetti-Spaccamela, Leen Stougie and Andrea Vitaletti

Bicriteria optimization for data aggregation in sensor networks

12:00 Lunch

14:00 Regular Talks - Parallel Sessions 1

Track A (4*20 min.)

Eyjolfur Asgeirsson and Clifford Stein

Using Markov chains to design algorithms for bounded-space on-line bin cover

Jacob Jan Paulus and Johann Hurink

Decomposition method for project scheduling with adjacent resources

Kazuo Iwama and Guochuan Zhang

On-line removable knapsack with resource augmentation

Marton Drotos, Gabor Erdos and Tamas Kis

A lower bound and a tabu search algorithm for scheduling batches in a proportional job shop

Track B (4*20 min.)

Maciej Machowiak, Jacek Blazewicz and Ceyda Oguz

Bounds in a berth and quay cranes allocation problem

Zehra Bilginturk, Ceyda Oguz and Sibel Salman

Order acceptance and scheduling in make-to-order systems with sequence dependent setups and deadlines

Mohammad Ranjbar and Fereydoon Kianfar

A genetic algorithm for the resource-constrained project scheduling problem with flexible work profiles

Florent Blachot, Guillaume Huard, Jonathan Pecero, Erik Saule and Denis Trystram

Scheduling instructions on processors with incomplete bypass

15:20 Coffee break

15:50 Regular Talks - Parallel Sessions 2

Track A (4*20 min.)

Marjan van den Akker, Han Hoogeveen and Jules van Kempen

Using column generation to solve parallel machine scheduling problems with minmax objective functions

Adrien Bellanger and Ammar Oulamara

Scheduling hybrid flowshop with parallel batching machines and task compatibilities

Dirk Briskorn and Andreas Drexl

Constructing fair sports leagues schedules

Hans Kellerer and Celia A. Glass

Algorithms for parallel machine problems with capacity restrictions

Track B (4*20 min.)

Wladyslaw Adam Janiak and Adam Janiak

Scheduling problems with due windows assignment - a survey

Csanad Imreh, Zoltan Blazsik, Gabor hajos and Zoltan Kovacs

Heuristic algorithms for a complex resource allocation problem

Cédric Pessan, Julien Morisseau, Emmanuel Néron and Jean Louis Bouquard

A one machine scheduling problem with sequence and time dependent setup times

Evripidis Bampis, Giorgio Lucarelli and Ioannis Milis

On a batch scheduling problem with compatibility and cardinality constraints

17:10 End of talks

18:00 Dinner

Wednesday

09:00 Invited Talk

Muthu Muthukrishnan
Algorithmic issues in scheduling sponsored searches

10:00 Coffee break

10:30 Regular Talks - Parallel Sessions

Track A (3*20 min.)

Erwin Pesch

Efficient aircraft gate assignments

Steef Van de Velde and Arianna Alfieri

Minimizing total completion time in a two-machine flowshop for minimum makespan schedules

Jeff Edmonds and Kirk Pruhs

Cake cutting is and is not a piece of cake

Track B (3*20 min.)

Anna Robert and Claude Le Pape

Optimizing size of batches between production planning and scheduling to improve APS performance

Cédric Mocquillon, Christophe Lenté and Vincent T'Kindt

A heuristic for a multicriteria shampoo production problem

Mikhail Kovalyov and Maxim Barketau

"Product partition" and related scheduling problems with job deterioration

11:30 End of talks

12:00 Lunch

14:00 Social Events

18:00 Workshop Dinner

Thursday

09:00 Invited Talk

Claire Kenyon
Approximation algorithms for scheduling problems

10:00 Coffee break

10:30 Plenary Talks (3*30 min)

Nadia Brauner, Gerd Finke, Vassilissa Lehoux-Lebacque, Christophe Rapine, Chris Potts and Vitaly Strusevich

Scheduling with operator non-availability periods

Jihuan Ding, Jiri Sgall and Guochuan Zhang

Online scheduling of equal-length jobs on parallel machines

Alexander Grigoriev and Marc Uetz

Scheduling parallel jobs with monotone speedup

12:00 Lunch

14:00 Regular Talks - Parallel Sessions 1

Track A (4*20 min.)

Alexey Fishkin, Rene Sitters and Prudence W.H. Wong

Bandwidth minimization algorithms

Sven Krumke and Katharina Rupp

Stochastic scheduling with application to vehicle routing

Peter Brucker and Natalia Shakhlevich

Inverse scheduling with maximum lateness objective

Nabil Absi and Safia Kedad-Sidhoum

Lagrangean heuristics for capacitated lot-sizing problem with setup times, safety stocks and shortage costs

Track B (4*20 min.)

Venkatesan Chakaravarthy, Vinayaka Pandit, Gyana Parija and Sambuddha Roy

On scheduling aspects of executing critical tasks

Nguyen Huynh Tuong, Ameer Soukhal and Jean-Charles Billaut

Uniform parallel machine scheduling problem with a common due date to minimize total weighted tardiness

Cyril Briand, Ourari Samia and Bouzouia Brahim

A new dominance condition for mono-pyramidal single machine problems

Michael Andresen, Heidemarie Bräsel, Marc Mörig, Jan Tusch, Frank Werner and Per Willenius

On mean flow time minimization for the open shop problem

15:20 Coffee break

15:50 Regular Talks - Parallel Sessions 2

Track A (3*20 min.)

John van den Broek, Cor Hurkens and Gerhard Woeginger

Job shop scheduling with precedence constraints that are no-wait or blocking

Christian Artigues and Cyril Briand

Complexity of activity insertion for resource-constrained project scheduling with minimum and maximum time lags

Christophe Rapine, Nadia Brauner, Gerd Finke and Vassilissa Lehoux-Lebacque

Operator non-availability: The case of small periods

Track B (4*20 min.)

Edmund Burke, Dario Landa-Silva and Baharuddin Mohamed

Preference nurse scheduling with squeaky wheel optimisation

Guido Diepen, Marjan van den Akker and Han Hoogeveen

Minimizing total weighted tardiness on a single machine with release dates and equal-length jobs

Alan Soper and Vitaly Strusevich

An approximation algorithm for the two-machine flow shop with a single transporter

Thijs Urlings, Ruben Ruiz and Funda Sivrikaya Serifoglu

Genetic algorithms for complex hybrid flexible flow line problems

17:10 End of talks

18:00 Dinner

Friday

09:00 Invited Talk

Sandor Fekete

Scheduling robot motion in an unknown environment

10:00 Coffee break

10:30 Plenary Talks (2*30 min)

Christoph Dürr and Hurand Mathilde

Finding total unimodularity in optimization problems solved by linear programs

Mathilde Hurand, Marek Chrobak and Jiri Sgall

Algorithms for testing fault-tolerance

11:30 end of workshop