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 Sonnikow
         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 Oznur 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 Tchetgenia 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 Drexel
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
Lagrangian 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, Ameur 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 Mörg, 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

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**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