Monday

| 8:50 Welcome: Marc Uetz, Tjark Vredeveld, Cliff Stein |  |
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| 9:00 Invited Speaker: | Chandra Chekuri |
| Online Broadcast Scheduling: New Perspectives and Results |  |
| 9:50 Plenary: Nikhil Bansal, Ho Speed Scaling with an | Leung Chan and Kirk Pruhs rbitrary Power Function |
| 10:20 Coffee Break |  |
| 11:00 Parallel Sessions |  |
| Session A | Session B |
| Schulz and Uhan <br> Near-Optimal Solutions and Large Integrality Gaps for Almost All Instances of Single-Machine Precedence-Constrained Scheduling | Elvikis, Hamacher and T'Kindt Scheduling two interfering job sets on uniform parallel machines with sum and makespan criteria |
| Kordon, Kacem, Dupont de Dinechin and Finta <br> Minimizing the makespan for an interval ordered precedence graph on $m$ processors with communication delays and unit execution time tasks | Urlings and Ruiz <br> A new algorithm for multidimensional scheduling problems |
| Koch, Peis, Skutella and Wiese <br> Routing and Scheduling Messages through Communication Networks: Approximation Algorithms and Complexity | Zinder and Walker <br> Scheduling flexible multiprocessor tasks on parallel machines |
| Ambühl, Mastrolilli, Mutsanas and Svensson Precedence Constraint Scheduling: Connections to Dimension Theory of Partial Orders and Inapproximability Results | Hanen, Lacomme, Medernach and Sanlaville <br> Two formulations for a grid cyclic scheduling problem |
| 12:30 Lunch |  |
| 14:30 Parallel Sessions |  |
| Session A | Session B |
| Goossens, Polyakovskiy, Spieksma and Woeginger The focus of attention problem | Cucu-Grosjean and Sorel <br> A schedulability test for real-time dependant periodic task systems with latency constraints |
| Harren and Van Stee <br> An Absolute 2-Approximation for Rectangle Packing | Gordon and Strusevich <br> Single machine due date assignment and scheduling with positionally dependent processing times |
| Hiller and Vredeveld <br> Stochastic dominance analysis of online bin coloring algorithms | Bell and Wong <br> Multiprocessor Speed Scaling for Jobs with Arbitrary Sizes and Deadlines |
| Günther, König and Megow The Bin Scheduling Problem | Fung <br> Online Algorithms for Maximizing Weighted Throughput of Unit Jobs with Temperature Constraints |
| 15:50 Coffee Break |  |
| The Power of Reordering for Online Minimum Makespan Scheduling |  |
| 16:50 Short Break \& Room Change |  |
| 17:00 Parallel Sessions |  |
| Session A | Session B |
| Correa, Skutella and Verschae <br> The power of preemption on unrelated machines and applications to scheduling orders | Chan, Chin, Ting and Zhang Online Tree Node Assignment with Resource Augmentation |
| Sitters <br> Minimizing average flow time on unrelated machines | Kern and Paulus <br> On the lower bound for online strip packing |
| Höhn, Jacobs and Megow <br> On Eulerian Extension Problems and their Application to Sequencing Problems | Saliba, Krumke, Hiller and Tuchscherer Randomized online algorithms for the dynamic multiperiod routing problem |
| Ebenlendr and Sgall <br> Semi-Online Preemptive Scheduling: One Algorithm for All Variants |  |
| 19:00 Welcome Rece | tion \& Dinner |

## Tuesday

| 9:00 Invited Speaker: Sanjoy K. BaruahTemporal Isolation in Multi-User Real-Time Environments |  |
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| 9:50 Plenary: M. Mastrolilli, M. Queyran Minimizing the sum of weighted | e, A.S. Schulz, O. Svensson and N.A. Uhan mpletion times in a concurrent open shop |
| 10:20 Coffee Break |  |
| 11:00 Parallel Sessions |  |
| Session A | Session B |
| Edmonds and Pruhs <br> Scalably Scheduling Processes with Arbitrary Speedup Curves | Adineh-Vand, Parandin, Azghadi and Khalilzadeh Solving Multi-Processor Task Scheduling Problem Using a Combinatorial Evolutionary Algorithm |
| Han, Lam, Lee, To and Wong <br> Deadline Scheduling and Power Management for Speed Bounded Processors | Van den Akker, Hoogeveen and Kammer <br> Simulated annealing with commonalities for the job shop scheduling problem |
| Greiner, Nonner and Souza <br> The Bell is Ringing in Speed-Scaled Multiprocessor Scheduling | Bougeret, Dutot and Trystram <br> The guess approximation technique and its application to the Discrete Resource Sharing Scheduling Problem |
| Coene, Woeginger and Spieksma <br> Charlemagne's challenge: the periodic latency problem | Piana and Engell <br> Evolutionary Scheduling in Pipeless Chemical Batch Plants on the Basis of a Simulation and Approximation Mode |
| 12:30 Lunch |  |
| 14:30 Parallel Sessions |  |
| Session A | Session B |
| Bonifaci, Marchetti-Spaccamela and Stiller $\begin{gathered} \text { A }\left(2-\frac{1}{m}\right) \text {-approximate feasibility test for sporadic } \\ \text { multiprocessor real-time scheduling } \end{gathered}$ | Kozan <br> A Robust Reactive Scheduling Model for Intensive Care Units |
| Fisher and Dewan <br> Minimum Capacity Allocation for EDF-Scheduled Recurring Tasks upon a Periodic Resource | Kis and Kovács <br> On bilevel machine scheduling problems |
| Dürr, Jeż and Nguyen <br> Online Scheduling of Bounded Length Jobs to Maximize Throughput | Shioura, Shakhlevich and Strusevich <br> A divide-and-conquer algorithm for polymatroidal formulation of scheduling with controllable processing times |
| Fung, Poon and Zheng <br> Improved Randomized Online Scheduling of Intervals and Jobs | Ásgeirsson, Carpenter, Leemis, Phillips, Phillips and Stein <br> Managing Magnetic Resonance Imaging Machines: Optimal Purchases and Schedules |
| 15:50 Coffee Break |  |
| (Acyclic) Job Shops are Hard to Approximate |  |
| 16:50 Short Break \& Room Change |  |
| 17:00 Parallel Sessions |  |
| Session A | Session B |
| Karakostas, Kolliopoulos and Wang <br> An FPTAS for the minimum total weighted tardiness problem with a fixed number of distinct due dates | Hemig and Zimmermann <br> Integrated Production and Staff Planning in the Automotive Industry |
| Chang, Erlebach, Gailis and Khuller Broadcast Scheduling: Algorithms and Complexity | Pawlak and Kimms <br> Workers assignment in the assembly line balancing problem |
| Hansen and Krumke <br> The complexity of integrating timetabling and vehicle scheduling | Ásgeirsson <br> Staff Scheduling with Partial Schedules from Employees |
| Eggermont, Firat, Hurkens and Modelski Disruption Management for Commercial Aviation, ROADEF 2009 Challenge | Firat and Hurkens <br> Constructing Stable Schedules of Tasks with Skill Requirements |
| 19:00 | inner |

Wednesday

| 9:00Invited Speaker: Friedrich Eisenbrand <br> Real-time Scheduling: Approximation Algorithms and Hardness Results |
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| Plenary: Chris N. Potts and Vitaly A. Strusevich |
| Fifty Years of Scheduling: A Survey of Milestones |

Thursday

| 9:00Invited Speaker: <br> Scheduling in Algor | Tim Roughgarden <br> thmic Game Theory |
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| Plenary: Nikhil Ban On hardness of minimizing weighted co | On hardness of minimizing weighted completion time with precedence constraints |
| 10:20 Coffee | Break |
| 11:00 Paralle | Sessions |
| Session A | Session B |
| Mastrolilli, Mutsanas and Svensson <br> Approximating Single Machine Scheduling with Scenarios | Bianco and Caramia <br> The Resource Constraints Project Scheduling Problem with Feeding Precedence Relations: <br> A Lower Bound |
| Baptiste <br> Scheduling Identical Coupled Tasks in Constant Time (almost) | Ebenlendr and Sgall <br> A lower bound for scheduling of unit jobs with immediate decision on parallel machines |
| Zajíček, Sgall and Ebenlendr Scheduling Parallel Jobs on Hypercubes | Pessan, Haouari and Néron <br> Energetic reasoning and production resetting optimization |
| Van den Akker, Hoogeveen and Diepen <br> More Efficient Algorithms for Resource Constrained Project Scheduling Problems | Briskorn, Choi, Lee, Leung and Pinedo Single machine scheduling with regard to inventory constraints |
| 12:30 Lunch |  |
| 14:30 Parallel Sessions |  |
| Session A | Session B |
| Dürr and Nguyen <br> Non-Clairvoyant Scheduling Games | Kovalyov and Pesch <br> A generic approach to proving NP-hardness of partition type scheduling and other combinatorial problems |
| Marchetti-Spaccamela, Megow, Skutella and Stougie Price of robustness in single machine scheduling | Munier-Kordon and Rebaine <br> Scheduling coupled unit-time operations on identical parallel machines |
| Thielen <br> Generalized Truthful Mechanisms for Scheduling Verifiable Related Machines | Van den Broek and Hurkens <br> A branch and bound algorithm for job shops with no-wait and blocking precedence constraints |
| Epstein, Kleiman and Van Stee <br> Maximizing the Minimum Load: The Cost of Selfishness | Sotelo Pinheiro da Silva and Poggi <br> A Linear-time Approximation Algorithm for Permutation Flow Shop Scheduling Problem |
| 15:50 Coffee Break |  |
| Graph Balancing: A Special Case of Scheduling Unrelated Parallel Machines |  |
| 16:50 Short Break \& Room Change |  |
| 17:00 Parallel Sessions |  |
| Session A | Session B |
| Horbach and Briskorn <br> An exact method for Scheduling Real World Sports Leagues | Balogh, Békési, Galambos and Krész <br> Model and Algorithm for a Vehicle Scheduling Problem with Refueling |
| Höhn, König, Lübbecke and Möhring Scheduling in Coil Coating with Shuttles | Grigoriev and Kononov <br> How to price parallel machines to maximize the revenue |
| Hiller, Klug and Tuchscherer <br> Improving the performance of elevator systems using exact reoptimization algorithms | Brouwer, Post and Woeginger <br> Tight bounds for break minimization in tournament scheduling |
| Henzinger, Radovanovic and Stein Scheduling a Large Datacenter | Rutten <br> Scheduling in a complex setting |
| 19:00 Dinner |  |

Friday

| 9:30 Invited Speaker: Frits C.R. Spieksma |  |
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| 10:20 Coffee Break |  |
| 11:00 Parallel Sessions |  |
| Session A | Session B |
| Kononov, Sevastyanov and Sviridenko Complete Complexity Classification of Short Shop Scheduling | Sterna and Juraszek <br> On-line scheduler for web service for language translation |
| Sevastyanov, Lin and Hwang <br> Makespan Minimization in Parallel Flow Shops | Błażewicz, Mahowiak and Oğuz <br> Worst case analysis for berth and quay crane allocation problem |
| Chubanov and Pesch <br> An approximation scheme for concave network flow problems | Bley, Boland, Fricke and Froyland Clique-based facets for the precedence constrained knapsack problem |
| Alfieri, Glass and Van de Velde <br> Two-machine lotstreaming with setup times | Funk and Meka <br> U-LLREF: An Optimal Scheduling Algorithm for Uniform Multiprocessors |
| 12:30 Lunch |  |

