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Nota di contenuto	Invited Talks -- Airline Scheduling: Accomplishments, Opportunities and Challenges -- Selected Challenges from Distribution and Commerce in the Airline and Travel Industry -- 30 Years of Constraint Programming -- Long Papers -- Constraint Integer Programming: A New Approach to Integrate CP and MIP -- New Filtering for the Constraint in the Context of Non-Overlapping Rectangles -- Multi-stage Benders Decomposition for Optimizing Multicore Architectures -- Fast and Scalable Domino Portrait Generation -- Gap Reduction

Techniques for Online Stochastic Project Scheduling -- Integrating Symmetry, Dominance, and Bound-and-Bound in a Multiple Knapsack Solver -- Cost Propagation – Numerical Propagation for Optimization Problems -- Fitness-Distance Correlation and Solution-Guided Multi-point Constructive Search for CSPs -- Leveraging Belief Propagation, Backtrack Search, and Statistics for Model Counting -- The Accuracy of Search Heuristics: An Empirical Study on Knapsack Problems -- A Novel Approach For Detecting Symmetries in CSP Models -- Amsaa: A Multistep Anticipatory Algorithm for Online Stochastic Combinatorial Optimization -- Optimal Deployment of Eventually-Serializable Data Services -- Counting Solutions of Knapsack Constraints -- From High-Level Model to Branch-and-Price Solution in G12 -- Simpler and Incremental Consistency Checking and Arc Consistency Filtering Algorithms for the Weighted Spanning Tree Constraint -- Stochastic Satisfiability Modulo Theories for Non-linear Arithmetic -- A Hybrid Constraint Programming / Local Search Approach to the Job-Shop Scheduling Problem -- Short Papers -- Counting Solutions of Integer Programs Using Unrestricted Subtree Detection -- Rapidly Solving an Online Sequence of Maximum Flow Problems with Extensions to Computing Robust Minimum Cuts -- A Hybrid Approach for Solving Shift-Selection and Task-Sequencing Problems -- Solving a Log-Truck Scheduling Problem with Constraint Programming -- Using Local Search to Speed Up Filtering Algorithms for Some NP-Hard Constraints -- Connections in Networks: A Hybrid Approach -- Efficient Haplotype Inference with Combined CP and OR Techniques -- Integration of CP and Compilation Techniques for Instruction Sequence Test Generation -- Propagating Separable Equalities in an MDD Store -- The Weighted Cfg Constraint -- CP with ACO -- A Combinatorial Auction Framework for Solving Decentralized Scheduling Problems (Extended Abstract) -- Constraint Optimization and Abstraction for Embedded Intelligent Systems -- A Parallel Macro Partitioning Framework for Solving Mixed Integer Programs -- Guiding Stochastic Search by Dynamic Learning of the Problem Topography -- Hybrid Variants for Iterative Flattening Search -- Global Propagation of Practicability Constraints -- The Polytope of Tree-Structured Binary Constraint Satisfaction Problems -- A Tabu Search Method for Interval Constraints -- The Steel Mill Slab Design Problem Revisited -- Filtering Atmost1 on Pairs of Set Variables -- Extended Abstract -- Mobility Allowance Shuttle Transit (MAST) Services: MIP Formulation and Strengthening with Logic Constraints.

Sommario/riassunto

The 5th International Conference on Integration of AI and OR Techniques in Constraint Programming for Combinatorial Optimization Problems (CPAIOR 2008) was held in Paris, France May 20–23, 2008. The purpose of this conference series is to bring together researchers in the ?elds of constraint programming, arti?cial intelligence, and operations research to explore ways of solving large-scale, practical optimization problems through integration and hybridization of the ? elds' di?erent techniques. Through the years, this research community is discovering that the ?elds have much in c- mon, and there has been tremendous richness in the resulting cross-fertilization of ?elds. This year, we allowed submissions of both long (15 page) and short (5 page) papers, with short papers either being original work, a reduced version of a long paper, or an extended abstract of work published elsewhere. We were not s- prised by the 69 submissions in the long paper category: this is an active ?eld with many researchers. We were surprised by the 61 short paper submissions. This was far more than predicted. With 130 high-quality submissions, compe- tion for acceptance in this year's program was particularly ?erce. In the end, we accepted 18 long papers and 22 short papers for presentation and

publication in this volume.