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	Nota di contenuto	Invited Lectures -- Caching in Backtracking Search -- Of Mousetraps and Men: A Cautionary Tale -- Application Papers -- Estimation of the Minimal Duration of an Attitude Change for an Autonomous Agile Earth-Observing Satellite -- Solving an Air Conditioning System Problem in an Embodiment Design Context Using Constraint Satisfaction Techniques -- Solving the Salinity Control Problem in a Potable Water System -- Exploring Different Constraint-Based Modelings for Program Verification -- An Application of Constraint Programming to Generating Detailed Operations Schedules for Steel Manufacturing -- An Efficient Model and Strategy for the Steel Mill Slab Design Problem -- Constraint-Based Temporal Reasoning for E-Learning with LODE -- Scheduling for Cellular Manufacturing -- Full Research Papers -- A Constraint Store Based on Multivalued Decision Diagrams -- GAC Via Unit Propagation -- Solution Directed Backjumping for QCSP -- Reformulating CSPs for Scalability with Application to Geospatial Reasoning -- A Generic Geometrical Constraint Kernel in Space and Time for Handling Polymorphic k-Dimensional Objects -- Local Symmetry Breaking During Search in CSPs -- Encodings of the Sequence Constraint -- On Inconsistent Clause-Subsets for Max-SAT Solving -- An Abstract Interpretation Based Combinator for Modelling While Loops in Constraint Programming -- Tradeoffs in the Complexity of Backdoor Detection -- Model-Driven Visualizations of Constraint-Based Local Search -- Dealing with

Incomplete Preferences in Soft Constraint Problems -- Efficient Computation of Minimal Point Algebra Constraints by Metagraph Closure -- MUST: Provide a Finer-Grained Explanation of Unsatisfiability -- An Integrated White+Black Box Approach for Designing and Tuning Stochastic Local Search -- Limitations of Restricted Branching in Clause Learning -- Dynamic Management of Heuristics for Solving Structured CSPs -- A Compression Algorithm for Large Arity Extensional Constraints -- Valid Inequality Based Lower Bounds for WCSP -- Advisors for Incremental Propagation -- Breaking Symmetry of Interchangeable Variables and Values -- Path Consistency by Dual Consistency -- Exploiting Past and Future: Pruning by Inconsistent Partial State Dominance -- Scheduling Conditional Task Graphs -- Towards Robust CNF Encodings of Cardinality Constraints -- AND/OR Multi-valued Decision Diagrams for Constraint Optimization -- Parallelizing Constraint Programs Transparently -- MiniZinc: Towards a Standard CP Modelling Language -- Propagation = Lazy Clause Generation -- Boosting Probabilistic Choice Operators -- A Multi-engine Solver for Quantified Boolean Formulas -- Decomposing Global Grammar Constraints -- Structural Relaxations by Variable Renaming and Their Compilation for Solving MinCostSAT -- Bound-Consistent Deviation Constraint -- Constructive Interval Disjunction -- An LP-Based Heuristic for Optimal Planning -- A Cost-Based Model and Algorithms for Interleaving Solving and Elicitation of CSPs -- On Universal Restart Strategies for Backtracking Search -- Hierarchical Hardness Models for SAT -- SATzilla-07: The Design and Analysis of an Algorithm Portfolio for SAT -- Filtering for Subgraph Isomorphism -- Solution Counting Algorithms for Constraint-Centered Search Heuristics -- Min-Domain Ordering for Asynchronous Backtracking -- Short Research Papers -- Answer Set Optimization for and/or Composition of CP-Nets: A Security Scenario -- Uncertainty in Bipolar Preference Problems -- An Analysis of Slow Convergence in Interval Propagation -- The Expressive Power of Valued Constraints: Hierarchies and Collapses -- Eligible and Frozen Constraints for Solving Temporal Qualitative Constraint Networks -- The Log-Support Encoding of CSP into SAT -- Groupoids and Conditional Symmetry -- Sampling Strategies and Variable Selection in Weighted Degree Heuristics -- A Case for Simple SAT Solvers -- CP-Based Local Branching -- Strong Controllability of Disjunctive Temporal Problems with Uncertainty -- Exploiting Single-Cycle Symmetries in Branch-and-Prune algorithms -- Constraint Symmetry for the Soft CSP -- Breaking Value Symmetry.

| Sommario/riassunto | The 13th International Conference on Principles and Practice of Constraint Programming (CP 2007) was held in Providence, RI, USA, September 23–27, 2007, in conjunction with the International Conference on Automated Planning and Scheduling (ICAPS). Held annually, the CP conference series is the premier international conference on constraint programming. The conference focuses on all aspects of computing with constraints. The CP conference - ries is organized by the Association for Constraint Programming (ACP). - formation about the conferences in the series can be found on the Web at http://www. cs. ualberta. ca/~ai/cp/. Information about ACP can be found athttp://www. a4cp. org/. CP 2007 launched two calls for contributions: a call for research papers, describing novel contributions in the ?eld, and a call for application papers, describing applications of constraint technology in the industrial world. The research track received 143 submissions and the application track received 22 submissions. Research papers were reviewed under a double-blind scheme. They received three reviews that the authors had the opportunity to see and to react |

tobeforethepapersandtheirreviewswerediscussedextensivelybythememb ers of the Program Committee. Application papers were reviewed by a separate- plication Committee. The Program Committee and the Application Committee then selected 43 research papers and 9 application papers to be published in full in the proceedings, andanadditional14researchpapersto be published as short papers. The full papers were presented at the conference in two parallel tracks and the short papers were presented in a poster session.