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Nota di contenuto	Constraint Satisfaction -- Efficient Pruning Technique Based on Linear Relaxations -- Inter-block Backtracking: Exploiting the Structure in Continuous CSPs -- Accelerating Consistency Techniques and Prony's Method for Reliable Parameter Estimation of Exponential Sums -- Global Optimization -- Convex Programming Methods for Global Optimization -- A Method for Global Optimization of Large Systems of Quadratic Constraints -- A Comparison of Methods for the Computation of Affine Lower Bound Functions for Polynomials -- Using a Cooperative Solving Approach to Global Optimization Problems -- Global Optimization of Convex Multiplicative Programs by Duality Theory -- Applications -- High-Fidelity Models in Global Optimization -- Incremental Construction of the Robot's Environmental Map Using Interval Analysis -- Nonlinear Predictive Control Using Constraints Satisfaction -- Gas Turbine Model-Based Robust Fault Detection Using a Forward – Backward Test -- Benchmarking on Approaches to Interval Observation Applied to Robust Fault Detection.
Sommario/riassunto	Theformulationofmanypracticalproblemsnaturallyinvolvesconstraintsont

he variables entering the mathematical model of a real-life situation to be analyzed. It is of great interest to find the possible scenarios satisfying all constraints, and, if there are many of them, either to find the best solution, or to obtain a compact, explicit representation of the whole feasible set. The 2nd Workshop on Global Constrained Optimization and Constraint Satisfaction, COCOS 2003, which took place during November 18–21, 2003 in Lusanne, Switzerland, was dedicated to theoretical, algorithmic, and application oriented advances in answering these questions. Here global optimization refers to finding the absolutely best feasible point, while constraint satisfaction refers to finding all possible feasible points. As in COCOS 2002, the first such workshop (see the proceedings [1]), the emphasis was on complete solving techniques for problems involving continuous variables that provide all solutions with full rigor, and on applications which, however, were allowed to have relaxed standards of rigor. The participants used the opportunity to meet experts from global optimization, mathematical programming, constraint programming, and applications, and to present and discuss ongoing work and new directions in the field. Four invited lectures and 20 contributed talks were presented at the workshop. The invited lectures were given by John Hooker (Logic-Based Methods for Global Optimization), Jean-Pierre Merlet (Usual and Unusual Applications of Interval Analysis), Hermann Schichl (The COCONUT Optimization Environment), and Jorge Moré (Global Optimization Computational Servers). This volume contains the text of Hooker's invited lecture and of 12 contributed talks. Copies of the slides for most presentations can be found at [2].

Constraint satisfaction problems. Three papers focus on algorithmic aspects of constraint satisfaction problems.
