Preface

The management of constraints is an integral part of today's planning systems. It includes the simple orderings in POP systems as well as the exclusion relations of today's cutting-edge Graphplan-based planners. The need for expressive formalisms with efficient propagation and refinement techniques to extract solutions will grow further given the ongoing orientation toward real-world problems, which are constrained as regards temporal, spatial and many other resources. Constraint programming has much to contribute in this domain.

The workshop brings together researchers from the AI planning and the constraint programming (including SAT) communities. Despite early work to integrate activity planning and constraint reasoning, there has been little recent exchange between these communities. New interest is now being shown and results from the SAT field have already been integrated in some planners. The workshop promotes communication between researchers and seeks to highlight new and interesting ideas for combining planning with constraint programming. The workshop's topics include:

- Hybrid systems: separate planners and constraint solvers
- Integrated systems
- Rich plan representations allowing for a variety of constraints
- Planning with resource constraints
- Planning with nontrivial optimization goals
- Specialized propagation techniques and labeling heuristics
- Planning as constraint satisfaction/optimization
- Extended CSP frameworks for handling planning problems