

Preface

Classical planning has made huge advances in the last twenty years, leading to solvers able to create plans with thousands of actions for problems described by hundreds of propositions. Yet, the assumptions of classical planning (determinism, model completeness, etc) are often criticised as being too restrictive to address "real" planning problems. Recently, however, many researchers have started to exploit the good performance of classical planners, through compilations and other methods of reuse, to solve a much wider range of problems.

In this way, classical planners have been used for dealing with more expressive planning problems, including incomplete information, temporally extended goals and preferences, as well as to solve problems in various areas of application.

The AAAI-12 Workshop on Problem Solving using Classical Planners aimed to showcase ideas for new uses of classical planners, by presenting inspiring examples, both theoretical and applied. The submissions we received cover many different angles. The problems addressed range from planning under uncertainty (contingent, probabilistic, assumption-based, or conformant), to applications in service composition, system reconfiguration and cyber security, to even the problems of critiquing plans or generating planning problems! Likewise, approaches range from pure compilation (translating a problem into PDDL and solving it with a classical planner) to embedding classical planning techniques inside dedicated algorithms. This body of contributions help illustrate how the results of decades of research in classical planning are now being put to use.

The organizers would like to thank the authors and the members of the Program Committee, whose efforts made this workshop possible and its program so strong. This workshop has been partially supported by the Universidad Carlos III de Madrid (UC3M)

– *Héctor Palacios, Patrik Haslum, Jorge Baier, Cochairs*