Preface

Multiagent Systems (MAS) have become an important sub-field of AI, and several classical AI topics are now broadly studied in their MAS (i.e. distributed) variants. Multiagent Planning (MAP) extends classical AI Planning to domains where several agents can plan and act together. Application areas of MAP include multi-robot environments, cooperating Internet agents, logistics, manufacturing, military tasks etc.

While related MAS disciplines (e.g. Distributed Constraint Satisfaction) have benefited from standardized problem specifications and benchmarks, existing work on MAP is still very heterogeneous. Approaches differ for example in their emphasis on either the distributed planning or the distributed plan execution process, in the ways communication and perception are used, and in whether a global plan for all agents or a local plan for each agent is produced. Some of the underlying questions have been recently addressed in related fields, such as in extensions of Classical Planning to concurrent plan models or in distributed versions of heuristic search algorithms, but the diversity of MAP approaches makes it difficult for MAP research as a whole to benefit from these developments.

Therefore, this workshop brings together researchers working on any form of Multiagent planning or in related fields to discuss their common and differing goals and research methods, and to identify potentials for collaboration and cross-fertilization.

Eleven papers were accepted for presentation at the workshop, on topics such as distributed hierarchical planning, multi-agent estimated-regression planning, team formation, dynamic negotiation, and multi-agent POMDPs. The workshop will also include invited papers and panel sessions, as well as ample time for discussion of issues of broad interest to the MAS planning community.

Michael Brenner and Marie desJardins, Workshop Co-Chairs