



**ECP-01**  
**6th European Conference on Planning**  
**September 12 - 14, 2001**  
**Toledo, Spain**

**CALL FOR PAPERS**

<http://scalab.uc3m.es/~ecp01/>  
<http://pst.ip.rm.cnr.it/ECP/>

ECP is a major international conference for presentation of new research in AI Planning and Scheduling, and a fruitful opportunity for contact and cross-fertilization among the different “souls” in the field. It has taken place in Europe every other year since 1991. It has evolved very quickly from a restricted workshop mainly devoted to the presentation of European research to a well established conference devoted to the presentation of rigorous and innovative research results from the international community. The sixth ECP conference will take place in the center of historical Toledo, the very well known old Spanish city, crossing of many different cultures (Arabic, Jewish and Christian). ECP-01 would like to follow its established scientific tradition, also including events that highlight specific aspects of planning and scheduling research in the new millennium.

**TOPICS**

ECP-01 encourages submissions on any topic in the planning and scheduling domain. The papers, which should be original, innovative and of high technical quality, may concern, not exhaustively, any of the following topics:

*\* domain-independent planning \* planning and complexity \* planning and scheduling under uncertainty \* scheduling algorithms \* decision-theoretic planning and scheduling \* planning and reasoning about actions \* plan recognition \* planning and perception \* planning and learning \* knowledge engineering techniques for planning and scheduling \* planning and scheduling with complex domain models \* deductive planning \* model-theoretic approaches to planning \* constraint reasoning for planning and scheduling \* distributed and multi-agent planning and scheduling \* planning and execution \* reactive planning \* dynamic scheduling \* scalability in planning and scheduling \* mixed-initiative problem solving \* case-based planning \* robot planning \* applications of planning and scheduling \* planning, scheduling and the new information technology.*

In addition, ECP-01 will include two special tracks that particularly testify to the current effort of the AI planning and scheduling community to create a bridge between labs and the real world. If sufficiently many good papers are submitted on these topics, they will be specially grouped within the regular sessions. There may also be discussion panels and/or invited talks on these topics. The special tracks are the following:

**Planning, scheduling, and their integration:** In the last ten years, there has been increasing awareness of the importance of integrating planning and scheduling techniques. In fact such integration may create a useful premise for addressing very complex real problems (e.g., the control of various autonomous systems). At present examples of the integration exist in some software architectures but the understanding of the theoretical basis of this integration is at an early stage. Many relevant questions remain open, such as: the role of constraint-satisfaction techniques as the common root for such integration; the issue of interleaving planning and scheduling versus actually integrating them; the role that languages for describing the domain features play in planning and scheduling; and the analysis of the classes of problems where such integration is actually needed.

**Plans, schedules and their robustness:** When considering the solution of a given planning/scheduling problem in isolation, a natural measure of solution quality is plan minimal length. When problem solving is performed within the broader perspective of a plan life-cycle, other metrics become relevant. One class of such metrics concerns plan robustness, where robustness might be broadly defined as the ability of a plan to be resistant to changes over its lifetime. The concept of robustness is implicitly contained in some current research but an explicitation of the problems it involves requires attention. We would like to create an opportunity for discussing issues related to plan/schedule robustness in the large, including the development of clear definitions of and evaluation metrics for robustness, the design of methods for producing “robust plans”, clarification of the role of formal verification and validation in this concern, and comparison of the differences that may exist between robust planning and scheduling.

The same standards will be applied to papers whether or not they are on the special topics. Additionally, ECP-01 encourages submission in the following special categories:

**Benchmarks:** descriptions of test cases derived from significant real world problems or formulation of artificial problems that clearly point out difficulties not addressed by current technology. In both cases the description should be accurate and detailed enough to allow other research to reproduce/use it.

**Demonstrations:** descriptions of real world prototypes and demonstration systems that show planning and scheduling systems taken not only in isolation but also used/embedded in larger systems. Submission in this category should have a running demo to be showed during a specific event at the conference.

Submissions in these last two categories will be reviewed by a specific subgroup within the program committee that will judge both their pertinence and relevance, and also recommend how they will be presented at the conference. Selected submissions in both categories will appear in a special section on the conference post-proceedings, in addition they will be allotted space on the permanent Web pages of PLANET—the European Network of Excellence in AI Planning and Scheduling (<http://planet.dfki.de/>).

## SUBMISSION

Papers should have a front page containing the title, the names and full addresses—including e-mail addresses and fax numbers—of all authors, keywords, and a 100-200 word abstract. Papers should be written in English, in 12pt type and must not exceed 12 pages, excluding front page and references.

Please specify in the first page immediately after the abstract a list of keywords characterizing your work. If you are submitting a paper to a special track or special category please select one of the following items as your first keyword: “INTEGRATION”, “ROBUSTNESS”, “BENCHMARK”, or “DEMO”.

The primary means of submission will be electronic, in PostScript or PDF format. Papers should be compressed using **compress** or **gzip**, then encoded using **uuencode**, and e-mailed to the programme chair. If electronic submission is not possible, five hard copies should be sent to the postal address given below. All papers must reach the programme chair by

**April 27, 2001**

Notification of acceptance or rejection will be mailed to the first or designated author on or before June 14, 2001. Accepted papers must be presented at the conference, in English, by one of the authors. As usual for ECP, the edited version of all the accepted papers will be included in the official conference post-proceedings published by Springer-Verlag in the LNAI series.

## PROGRAMME COMMITTEE

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