AIPS'02 Technical Program

Thursday April 25 (Saint Exupéry)

8:15-8:50 — Welcome coffee

8:50-9:00 — Welcome address

9:00-10:00 – Invited Talk: Bernhard Nebel
Chair : Joachim Hertzberg
The Philosophical Soccer Player

10:00-10:30 — Coffee break

10:30-12:30 — Session AIPS/KR 1:   Cognitive Robotics
Chair : Enrico Giunchiglia

Reasoning about Actions and Planning in LTL Action Theories. [+]
Diego Calvanese, Giuseppe De Giacomo, Moshe Y. Vardi

On the Semantics of Deliberation in IndiGolog – From Theory to Implementation. [+]
Giuseppe De Giacomo, Yves Lespérance, Hector J. Levesque, Sebastian Sardina

Plan Representation for Robotic Agents.
Michael Beetz

A Knowledge-Based Approach to Planning with Incomplete Information and Sensing. [#]
Ronald P. A. Petrick, Fahiem Bacchus

12:30-14:00 — Lunch at the Novotel Restaurant

14:00-15:30 — Session AIPS/KR 2:   Extended representations
Chair : Patrick Doherty

Actions and Other Events in Situation Calculus. [+]
John McCarthy

Universal Quantification in a Constraint-Based Planner.
Keith Golden, Jeremy Frank

The Logic of Reachability.
David E. Smith, Ari K. Jónsson

15:30-16:00 — Coffee break

16:00-17:30 — Session AIPS/KR 3:   Planning in non-deterministic Domains
Chair : Fahiem Bacchus

Improving Heuristics for Planning as Search in Belief Space.
Piergiorgio Bertoli, Alessandro Cimatti

Backward Plan Construction for Planning with Partial Observability.
Jussi T. Rintanen

Fragment-based Conformant Planning.
James A Kurien, P. Pandurang Nayak, David E. Smith

17:30-18:00 — AIPS Planning Competition

The third international Planning Competition : Temporal and Metric Planning.
Maria Fox, Derek Long

18:15 – Departure for Fondation Bemberg Museum : 30 min. nice walk, bus available for non walkers or if raining

19:00-21:00 – Visit of the Fondation Bemberg Museum and Buffet, **Hôtel d'Assezat, Place d'Assezat**

Friday April 26 (Cassiopée)

8:15-9:00 — Welcome coffee

9:00-10:30 - Session 4:   Learning & Domain Analysis
Chair : Manuela Veloso

CaMeL: Learning Method Preconditions for HTN Planning.
Ilghami Okhtay, Dana Nau, Hector Munoz-Avila, David W. Aha

On the Identification and Use of Hierarchical Resources in Planning and Scheduling.
Bernd Schattenberg, Susanne Biundo

On Control Knowledge Acquisition by Exploiting Human-Computer Interaction [(1)].
Ricardo Aler, Daniel Borrajo

An Interactive Method for Inducing Operator Descriptions [(2)].
T. L. McCluskey, N.E. Richardson, R.M. Simpson

10:30-11:00 — Coffee break

11:00-12:30 - Session 5:   Scheduling & Heuristics
Chair : Kanna Rajan

Filtering Algorithms for Batch Processing with Sequence Dependent Setup Times. [#]
Petr Vilím, Roman Barták

Constraint Model-based Planning and Scheduling with Multiple Resources and Complex Collaboration Schema.
Christophe Guettier, Bertrand Allo, Vincent Legendre, Jean-Clair Poncet, Nelly Strady-Lécubin

Symbolic Pattern Databases in Heuristic Search Planning [(4)].
Stefan Edelkamp

12:30-14:00 — Lunch at the Novotel Restaurant

14:00-15:00 - Invited Talk: Jan Karel Lenstra
Local Search in Combinatorial Optimization
Chair : Malik Ghallab

15:00-16:00 - Session 6:   Planning with Incomplete Information
Chair : Piergiorgio Bertoli

Execution Monitoring with Quantitative Temporal Dynamic Bayesian Networks.
Dirk Colbry, Bart Peintner, Martha E. Pollack

Heuristic Search-Based Replanning. [(5)]
Sven Koenig, David Furcy, Colin Bauer

A Plan-Based Personalized Cognitive Orthotic [(6)].
Colleen E. McCarthy, Martha E. Pollack

Faster Probabilistic Planning Through More Efficient Stochastic Satisfiability Problem Encodings [(7)].
Stephen M. Majercik, Andrew P. Rusczek

16:00-16:30 - Coffee break

16:00-18:00 - Session 7:   Interactive Session
Demonstrations and/or poster presentations of papers (1) through (9)
Chair : Malik Ghallab

Estimated-Regression Planning for Interactions with Web Services [(8)].
Drew V. McDermott

Speculative Execution for Information Gathering Plans [(9)].
Greg Barish, Craig A. Knoblock

18:00-19:00 – Awards and Scholarships Recipients
AIPS'02 Chairs

19:00 – AIPS Planning Competition
Results and analysis.
Maria Fox, Derek Long

19:45-22:00 : Banquet at "Les Caves de la Maréchale"

Saturday April 27 (Cassiopée)

8:15-9:00 — Welcome coffee

9:00-10:30 - Session 8:   Analysis & Optimization of Plans
Chair : Sam Steel

Analyzing Plans with Conditional Effects.
Elly Winner, Manuela Veloso

LPG: A Planner Based on Local Search for Planning Graphs with Action Costs.
Alfonso Gerevini, Ivan Serina

Planning Graph-based Heuristics for Cost-sensitive Temporal Planning.
Minh B. Do, Subbarao Kambhampati

10:30-11:00 — Coffee break

11:00-12:30 - Session 9:   Complexity & Planning
Chair : Jörg Hoffmann

Decidability and Undecidability Results for Planning with Numerical State Variables.
Malte Helmert

Structure and Complexity in Planning with Unary Operators.
Carmel Domshlak, Ronen I. Brafman

On the Role of Ground Actions in Refinement Planning.
Håkan L. S. Younes, Reid G. Simmons

12:30-14:00 — Lunch at the Novotel Restaurant

14:00-15:00 - Invited Talk: Martha Pollack
Plan-Management Assistants: From Homework Helpers to Cognitive Orthotics
Chair : Paolo Traverso

15:00-16:00 - Session 10: Distributed Planning & Execution
Chair : Craig Knoblock

Active Coordination of Distributed Human Planners.
Karen L. Myers, Peter A. Jarvis, Thomas J. Lee

Planning for Distributed Execution Through Use of Probabilistic Opponent Models. [#]
Patrick Riley, Manuela Veloso

16:00-16:30 — Coffee break

16:30-18:00 - Session 11: Replanning & Domain Analysis
Chair : Susanne Biundo

The FAR-OFF system: A Heuristic Search Case-Based Planning.
Flavio Tonidandel, Márcio Rillo

Applying Domain Analysis Techniques for Domain-Dependent Control in TALplanner.
Jonas Kvarnström

Local Search Topology in Planning Benchmarks: A Theoretical Analysis.
Jörg Hoffmann

Sunday April 28 : 10:00-12:00
Guided Visit of Historical Toulouse, offered by AIPS

[+] KR Papers

Papers (1) through (9) are detailed in the Interactive Session S7

[#] Best Paper Awards