

TUESDAY (July 11, 2023)		
08:00-09:00	Registration (N3)	
09:00-09:10	ICAPS 2023 Opening (N1)	
09:10-10:10	Invited Talk: (N1, chair: Roman Barták)	
	On Synthesis and Planning for Robot Behaviors	Hadas Kress-Gazit
10:10-11:10	Main 1 - Numeric Planning (N1, chair: Alvaro Torralba)	
	Fixing Plans for PDDL+ Problems: Theoretical and Practical Implications	Francesco Percassi, Enrico Scala and Mauro Vallati
	Symmetry Detection and Breaking in Linear Cost-Optimal Numeric Planning	Alexander Shleyfman, Ryo Kuroiwa and J. Christopher Beck
	Planning over Integers: Compilations and Undecidability (short)	Daniel Gnad, Malte Helmert, Peter Jonsson and Alexander
<i>online</i>	<i>Robust Metric Hybrid Planning in Stochastic Nonlinear Domains using Mathematical Optimization</i>	<i>Buser Say</i>
	Falsification of Cyber-Physical Systems Using PDDL+ Planning (short)	Diego Aineto, Enrico Scala, Eva Onaindia and Ivan Serina
10:10-11:10	Learning 1 (T1, chair: Ivan Serina)	
<i>online</i>	<i>Reinforcement Learning for Omega-Regular Specifications on Continuous-Time MDP</i>	<i>Amin Falah, Shibashis Guha and Ashutosh Trivedi</i>
	Exploration Policies for On-the-fly Controller Synthesis: a Reinforcement Learning Approach	Tomás Delgado, Marco Sánchez Sorondo, Víctor Braberman and Sebastián Uchitel
	An End-to-End Reinforcement Learning Approach for Job-Shop Scheduling Problems	Pierre Tassel, Martin Gebser and Konstantin Schekotihin
	Deceptive Reinforcement Learning in Model-Free Domains	Alan Lewis and Tim Miller
11:10-11:40	COFFEE BREAK (foyer - ground floor)	
11:40-12:40	Main 2 - Classical Planning (N1, chair: Mathijs de Weerd)	
	Optimality Certificates for Classical Planning	Esther Mugdan, Remo Christen and Salomé Eriksson
	Planning for Temporally Extended Goals in Pure-Past Linear Temporal Logic	Luigi Bonassi, Giuseppe De Giacomo, Marco Favorito, Francesco Fuggitti, Alfonso Emilio Gerevini and Enrico Scala
	Planning with Multiple Action-Cost Estimates	Eyal Weiss and Gal A. Kaminka
	A Planning Approach to Repair Domains with Incomplete Action Effects	Alba Gragera, Raquel Fuentetaja, Ángel García-Olaya and Fernando Fernández
11:40-12:40	Robotics 1 (T1, chair: Zlatan Ajanovic)	
	Planning for Automated Testing of Implicit Constraints in Behavior Trees	Uwe Köckemann, Daniele Calisi, Guglielmo Gemignani, Jennifer Renoux and Alessandro Saffiotti

	Understanding Natural Language in Context	Avichai Levy and Erez Karpas
	Approximating the Value of Collaborative Team Actions for Efficient Multiagent Navigation in Uncertain Graphs	Martina Stadler, Jacopo Banfi and Nicholas Roy
	Planning for Manipulation Among Movable Objects: Deciding Which Objects Go Where, In What Order, And How	Dhruv Saxena and Maxim Likhachev
12:40-14:00	LUNCH & ICAPS 101 Quiz (foyer - 1. floor)	
14:00-15:30	Main 3 - Scheduling, HTN, and Lifted Planning (N1, chair: Ron Alford)	
	Can They Come Together? A Computational Complexity Analysis of Conjunctive Possible Effects of Compound HTN	Conny Olz and Pascal Bercher
	On Partial Satisfaction Planning with Total-Order HTNs	Gregor Behnke, David Speck, Michael Katz and Shirin Sohrabi
	Operator Pruning using Lifted Mutex Groups via Compilation on Lifted Level	Daniel Fišer
	Lifted Stackelberg Planning (short)	Philipp Sauer, Marcel Steinmetz, Robert Kuennemann and Joerg Hoffmann
	Efficient Reasoning about Infeasible One Machine Sequencing	Raúl Mencía, Carlos Mencía and Joao Marques-Silva
	Sensitivity Analysis for Dynamic Control of PSTNs with Skewed Distributions (short)	Rosy Chen, Yiran Ma, Siqi Wu and James Boerkoel
	Parallel Batch Processing for the Coating Problem	Matthias Horn, Emir Demirović and Neil Yorke-Smith
14:00-15:30	IPC Results 1 (T1, chair: Mauro Vallati)	
	Classical Planning Track	Daniel Fišer and Florian Pommerening
	Probabilistic Planning Track	Ayal Taitler and Scott Sanner
	Numeric Planning Track	Joan Espasa Arxer and Enrico Scala
15:30-16:00	COFFEE BREAK (foyer - ground floor)	
16:00-17:00	Main 4 - RL and Pathfinding (N1, chair: Daniel Harabor)	
	Planning in Multi-Agent Domains with Untruthful Announcements	Loc Pham, Tran Cao Son and Enrico Pontelli
	Automatic Metamorphic Test Oracles for Action-Policy Testing	Jan Eisenhut, Álvaro Torralba, Maria Christakis and Joerg Hoffmann
	Act-Then-Measure: Reinforcement Learning for Partially Observable Environments with	Merlijn Krale, Thiago D. Simão and Nils Jansen
	Convexity Hierarchies in Grid Networks	Johannes Blum, Sabine Störandt and Ruoying Li
16:00-17:00	Journal 1 (T1, chair: Christian Muise)	
	Planning with Perspectives -- Decomposing Epistemic Planning using Functional STRIPS	Guang Hu, Tim Miller and Nir Lipovetzky

	Unavoidable deadends in deterministic partially observable contingent planning	Guy Shani, Lera Shtotland, Dorin Shmaryahu and Ronen Brafman
	Online Learning of Variable Ordering Heuristics for Constraint Optimisation Problems	Floris Doolaard and Neil Yorke-Smith
17:00-18:30	Poster (foyer - 1. floor) and System Demo Session (N6, N7, N9)	

	#	Title	Authors
1	189	DynamicWeight Setting for Personnel Scheduling with Many Objectives	Lucas Kletzander and Nysret Musliu
2	322	Efficient Evaluation of Large Abstractions for Decoupled Search: Merge-and-Shrink and Symbolic Pattern Databases	Daniel Gnad, Silvan Sievers and Álvaro Torralba
3	331	Using Simple Incentives to Improve Two-Sided Fairness in Ridesharing Systems	Ashwin Kumar, Yevgeniy Vorobeychik and William Yeoh
4	349	Approximating the Value of Collaborative Team Actions for Efficient Multiagent Navigation in Uncertain Graphs	Martina Stadler, Jacopo Banfi and Nicholas Roy
5	362	Domain Specific Situated Planning – Dissertation Abstract	Devin Thomas
6	717	Finding Matrix Multiplication Algorithms with Classical Planning	David Speck, Paul Höft, Daniel Gnad and Jendrik Seipp
7	1299	Fast and Robust Resource-Constrained Scheduling with Graph Neural Networks	Florent Teichteil-Königsbuch, Guillaume Pováda, Guillermo Gonzalez de Garibay Barba, Tim Luchterhand and Sylvie Thiebaux
8	1564	Automation-Guided Curriculum Generation for Reinforcement Learning Agents	Yash Shukla, Abhishkek Kulkarni, Robert Wright, Alvaro Velasquez and Jivko Sinapov
9	1871	Landmark Progression in Heuristic Search	Clemens Büchner, Thomas Keller, Salomé Eriksson and Malte Helmert
10	2500	Combining Clinical and Spatial Constraints into Temporal Planning to Personalize Physical Rehabilitation	Alessandro Umbrico, Marco Benadduci, Roberta Bevilacqua, Amedeo Cesta, Elvira Maranesi, Andrea Orlandini, Gabriella Cortellessa and Francesca Fracasso
11	3343	Planning with Perspectives -- Decomposing Epistemic Planning using Functional STRIPS	Guang Hu, Tim Miller and Nir Lipovetzky
12	3452	Operator Pruning using Lifted Mutex Groups via Compilation on Lifted Level	Daniel Fišer

13	3549	Safety Shielding under Delayed Observation	Filip Cano Córdoba, Alexander Palmisano, Martin Fränzle, Roderick Bloem and Bettina Könighofer
14	4148	Timed Partial Order Inference Algorithm	Kandai Watanabe, Bardh Hoxha, Danil Prokhorov, Georgios Fainekos, Morteza Lahijanian, Sriram Sankaranarayanan and Tomoya Yamaguchi
15	4629	Deceptive Reinforcement Learning in Model-Free Domains	Alan Lewis and Tim Miller
16	4882	Planning for Temporally Extended Goals in Pure-Past Linear Temporal Logic	Luigi Bonassi, Giuseppe De Giacomo, Marco Favorito, Francesco Fuggitti, Alfonso Emilio Gerevini and Enrico Scala
17	5455	Planning with Multi-agent Belief using Justified Perspectives	Guang Hu, Tim Miller and Nir Lipovetzky
18	5733	Combining Heuristic Search and Linear Programming to Compute Realistic Financial Plans	Alberto Pozanco, Kassiani Papisotiriou and Daniel Borrajo
19	5858	Planning for Attacker Entrapment in Adversarial Settings	Brittany Cates, Anagha Kulkarni and Sarath Sreedharan
20	6364	Planning for Manipulation Among Movable Objects: Deciding Which Objects Go Where, In What Order, And How	Dhruv Saxena and Maxim Likhachev
21	6492	Moving trains like pebbles: a feasibility study on tree yards	Issa Hanou, Mathijs de Weerd and Jesse Mulderij
22	6666	Fixing Plans for PDDL+ Problems: Theoretical and Practical Implications	Francesco Percassi, Enrico Scala and Mauro Vallati
23	6685	Act-Then-Measure: Reinforcement Learning for Partially Observable Environments with Active Measuring	Merlijn Krales, Thiago D. Simão and Nils Jansen
24	7001	Understanding Natural Language in Context	Avichai Levy and Erez Karpas
25	7212	Exploration Policies for On-the-Fly Controller Synthesis: A Reinforcement Learning Approach	Tomás Delgado, Marco Sánchez Sorondo, Víctor Braberman and Sebastián Uchitel
26	7227	Computing Domain Abstractions for Optimal Classical Planning with Counterexample-Guided Abstraction Refinement	Raphael Kreft, Clemens Büchner, Silvan Sievers and Malte Helmert

27	7324	Task Phasing: Automated Curriculum Learning from Demonstrations	Vaibhav Bajaj, Guni Sharon and Peter Stone
28	7752	Optimization Methods for Facility Location in Reverse Logistics	Ida Gjergji and Nysret Musliu
29	8471	Grounding Planning Tasks Using Tree Decompositions and Iterated Solving	Augusto B. Corrêa, Markus Hecher, Malte Helmert, Davide Mario Longo, Florian Pommerening and Stefan Woltran
30	9037	Goal Recognition with Timing Information	Chenyuan Zhang, Charles Kemp and Nir Lipovetzky
31	9210	Safe MDP Planning by Learning Temporal Patterns of Undesirable Trajectories and Averting Negative Side Effects	Siow Meng Low, Akshat Kumar and Scott Sanner
32	9685	A Planning Approach to Repair Domains with Incomplete Action Effects	Alba Gragera, Raquel Fuentetaja, Ángel García-Olaya and Fernando Fernández