

May 6–10, 2024
Auckland, New Zealand



AAMAS '24

Proceedings of the 23rd International Conference on
Autonomous Agents and Multiagent Systems

General Chairs:

Mehdi Dastani (Utrecht University, Netherlands)

Jaime Simão Sichman (University of São Paulo, Brazil)

Program Chairs:

Natasha Alechina (Utrecht University, Netherlands)

Virginia Dignum (Umeå University, Sweden)

Publication Chairs:

Fabian Lorig (Malmö University, Sweden)

Yingqian Zhang (Eindhoven University of Technology, Netherlands)

In cooperation with:

ACM



Copyright © 2024 by International Foundation for Autonomous Agents and Multiagent Systems (IFAAMAS). Permission to make digital or hard copies of portions of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and the full citation on the first page. Copyright for components of this work owned by others than IFAAMAS must be honored. Abstracting with credit is permitted. To copy otherwise, to republish, to post on servers or to redistribute to lists, requires prior specific permission and/or a fee.

www.ifaamas.org/proceedings.html

ISBN: 979-8-4007-0486-4

Prepared in the USA for the ACM DL.

Welcome Message from the Chairs

Welcome to AAMAS-2024, the 23th edition of the International Conference on Autonomous Agents and Multiagent Systems!

AAMAS is the largest and most influential conference in the area of agents and multiagent systems, bringing together researchers and practitioners in all areas of agent technology and providing an internationally renowned high-profile forum for publishing and finding out about the latest developments in the field. AAMAS is the flagship conference of the non-profit International Foundation for Autonomous Agents and Multiagent Systems (IFAAMAS).

After two attempts to hold AAMAS in New Zealand for the first time, which were forced online by the COVID19 pandemic, we are happy that the 2024 edition finally comes to Auckland, New Zealand. Previous editions were held in Bologna (2002), Melbourne (2003), New York (2004), Utrecht (2005), Hakodate (2006), Honolulu (2007), Estoril (2008), Budapest (2009), Toronto (2010), Taipei (2011), Valencia (2012), Saint Paul (2013), Paris (2014), Istanbul (2015), Singapore (2016), São Paulo (2017), Stockholm (2018), Montréal (2019), Auckland/online (2020), London/online (2021), Auckland/online (2022), and London (2023).

The main track of the conference includes peer-reviewed technical papers describing significant and original research on all aspects of the theory and practice of autonomous agents and multiagent systems, divided into the following areas of interest:

- Coordination, Organisations, Institutions, Norms and Ethics (COINE)
- Engineering Multiagent Systems (EMAS)
- Humans and AI / Human-Agent Interaction (HUMAN)
- Innovative Applications, in particular addressing the Sustainable Development Goals (APP)
- Knowledge Representation, Reasoning, and Planning (KRRP)
- Learning and Adaptation (LEARN)
- Markets, Auctions, and Non-Cooperative Game Theory (MA&NCGT)
- Modelling and Simulation of Societies (SIM)
- (Multiagent) Reinforcement Learning (RL)
- Robotics (ROBOT)
- Social Choice and Cooperative Game Theory (SC&CGT)

As in previous years, we worked with a three-tier programme committee, consisting of 23 area chairs, 89 senior programme committee members, and over 600 regular programme committee members. Their work was supported by a substantial number of auxiliary reviewers. When composing the committee, we followed the tradition of AAMAS of not having anyone serve in a senior programme committee or area chair role for more than two years in a row, and we were pleased to see that many senior colleagues accepted our invitation to serve as regular programme committee members.

For the main track, we received a total of 1113 submissions. Some didn't materialise and a few ended up getting desk-rejected (mostly

due to anonymity violations and similar infringements of the rules laid down in the Call for Papers). The programme committee then reviewed the remaining 847 submissions. Most submissions received at least three reviews, as well as a meta-review summarising the assessment of the programme committee. Authors had the opportunity to respond to initial versions of their reviews during a rebuttal phase.

The programme committee accepted 230 submissions as full papers and a further 184 as extended abstracts, resulting in an acceptance rate of 20% for full papers and an overall acceptance rate of around 36%. Most of these contributions are included in this volume of proceedings (excluding a couple of papers that were later withdrawn by their authors). The submission numbers (N), acceptance rates for full papers (FP), and overall acceptance rates (FP+EA) per area of interest are as follows:

	N	FP	FP+EA
COINE	21	4%	10%
EMAS	38	7%	13%
HUMAN	66	14%	26%
APP	21	11%	16%
KRRP	85	28%	50%
LEARN	70	15%	28%
MA&NCGT	87	19%	43%
SIM	50	20%	29%
RL	242	26%	50%
ROBOT	56	8%	16%
SC&CGT	110	39%	61%

In addition to the main track, the conference has four special tracks – the Blue Sky Ideas track, the JAAMAS track, AAAI track, and the Demonstration track – as well as a Doctoral Consortium.

The focus of the Blue Sky Ideas track, which this year is chaired by Ann Nowé and Amal El-Fallah Seghrouchni, is on visionary ideas, long-term challenges, new research opportunities, and controversial debate.

The JAAMAS track, chaired by Amit Chopra and Viviana Mascardi, offers authors of papers recently published in the *Journal of Autonomous Agents and Multiagent Systems* (JAAMAS) that have not previously appeared as full papers in an archival conference the opportunity to present their work at AAMAS.

New this year was the AAAI track which provided authors of high quality papers related to AAMAS topics, that didn't make it into the AAAI2024 conference, a fast track for reviewing at AAMAS. This track was chaired by Sven Koenig and Yang Chen.

The Demonstration and Competitions track, chaired by Luis Gustavo Nardin and Vahid Yazdanpanah, allows participants from both academia and industry to showcase their latest developments in agent-based and robotic systems.

Finally, the Doctoral Consortium, chaired by Bahar Rastegari and Serena Villata, provides doctoral candidates with an opportunity to receive feedback on their research, to interact closely with senior figures in their own area of specialisation, and to broaden their professional network.

The accepted contributions for all of these tracks are included in these proceedings as well: 10 accepted papers out of 35 submissions to the Blue Sky Ideas track; extended abstracts of 8 recent papers published in JAAMAS; 5 papers accepted in the AAI track; 10 accepted summaries out of 15 submissions to the Demonstration track; 24 accepted summaries to the Doctoral Consortium.

The first two days of the conference, 6-7 May 2024, will consist of a variety of satellite workshops, tutorials, and the Doctoral Consortium.

The main conference runs from 8-10 May 2024. During this time the authors of contributions to the main track, the Blue Sky Ideas track, the JAAMAS track, and the Demonstration track will present their work. We furthermore are looking forward to a panel session on “20 Years of AAMAS” as well as keynote addresses by Liz Sonenberg, Michael Winikoff, and Ann Nowé, as well as by this year’s recipient of the ACM/SIGAI Autonomous Agents Research Award, Catholijn Jonker, and the presentation by the winner of the 2024 Victor Lesser Dissertation Award, Niclas Boehmer.

The conference will also feature a social event, a series of informal discussion sessions organised around specific topics, and the annual IFAAMAS Community Meeting. Let us conclude these introductory words with a heartfelt expression of gratitude to all those who played a role in the success of this conference. We extend our thanks to all those who submitted their work for review, as well as those who will present their work at the conference. A special acknowledgment is owed to the dedicated members of the program committee, the additional reviewers, the organizers of the satellite workshops, and the tutorial presenters. We also want to express our appreciation to the organizing committee, for their continued efforts to bring AAMAS to New Zealand, after two times that were forced online due to the COVID19 pandemic. Lastly, we extend our sincere thanks to all the sponsors of the conference for their contribution to the success of AAMAS.

We wish you a great conference and are looking forward to meeting everyone in Auckland!

Natasha Alechina & Virginia Dignum
AAMAS-2024 Programme Chairs

Mehdi Dastani & Jaime Sichman
AAMAS-2024 General Chairs

Table of Contents

Conference Organisation	xxxix
Area Chairs	xl
Senior Programme Committee	xli
Programme Committee	xliii
Auxiliary Reviewers	xliv
Special Tracks Reviewers	xlvi
Awards	xlvi
Sponsors & Supporters	1
Keynote Talks	
• Trustworthy Reinforcement Learning: Opportunities and Challenges	1
Ann Nowé (<i>Vrije Universiteit Brussel</i>)	
• Agents and Humans: Trajectories and Perspectives	2
Liz Sonenberg (<i>The University of Melbourne</i>)	
• 30 Years of Engineering Multi-Agent Systems: What and Why?	3
Michael Winikoff (<i>Victoria University of Wellington</i>)	
Full Research Papers	
• Team Performance and User Satisfaction in Mixed Human-Agent Teams	4
Sami Abuhaimed (<i>The University of Tulsa</i>), Sandip Sen (<i>The University of Tulsa</i>)	
• Value-based Resource Matching with Fairness Criteria: Application to Agricultural Water Trading	13
Abhijn Adiga (<i>University of Virginia</i>), Yohai Trabelsi (<i>Bar-Ilan University</i>), Tanvir Ferdousi (<i>University of Virginia</i>), Madhav Marathe (<i>University of Virginia</i>), S. S. Ravi (<i>University of Virginia</i>), Samarth Swarup (<i>University of Virginia</i>), Anil Kumar Vullikanti (<i>University of Virginia</i>), Mandy L. Wilson (<i>University of Virginia</i>), Sarit Kraus (<i>Bar Ilan University</i>), Reetwika Basu (<i>Washington State University</i>), Supriya Savalkar (<i>Washington State University</i>), Matthew Yourek (<i>Washington State University</i>), Michael Brady (<i>Washington State University</i>), Kirti Rajagopalan (<i>Washington State University</i>), Jonathan Yoder (<i>Washington State University</i>)	
• Can Poverty Be Reduced by Acting on Discrimination? An Agent-based Model for Policy Making	22
Alba Aguilera (<i>Artificial Intelligence Research Institute, IIIA-CSIC</i>), Nieves Montes (<i>Artificial Intelligence Research Institute, IIIA-CSIC</i>), Georgina Curto (<i>University of Notre Dame</i>), Carles Sierra (<i>Artificial Intelligence Research Institute, IIIA-CSIC</i>), Nardine Osman (<i>Artificial Intelligence Research Institute, IIIA-CSIC</i>)	
• Provably Learning Nash Policies in Constrained Markov Potential Games	31
Pragnya Alatur (<i>Department of Computer Science, ETH AI Center</i>), Giorgia Ramponi (<i>Department of Computer Science, University of Zurich</i>), Niao He (<i>Department of Computer Science, ETH Zurich</i>), Andreas Krause (<i>Department of Computer Science, ETH Zurich</i>)	
• Beliefs, Shocks, and the Emergence of Roles in Asset Markets: An Agent-Based Modeling Approach	40
Evan Albers (<i>Khoury College of Computer Sciences, Northeastern University</i>), Mohammad T. Irfan (<i>Department of Computer Science, Bowdoin College</i>), Matthew J. Botsch (<i>Department of Economics, Bowdoin College</i>)	

• On the Potential and Limitations of Proxy Voting: Delegation with Incomplete Votes	49
Georgios Amanatidis (<i>University of Essex</i>), Aris Filos-Ratsikas (<i>University of Edinburgh</i>), Philip Lazos (<i>Input Output Global (IOG)</i>), Evangelos Markakis (<i>Athens University of Economics and Business & Input Output Global (IOG)</i>), Georgios Papasotiropoulos (<i>Athens University of Economics and Business, Input Output Global (IOG), & University of Warsaw</i>)	
• Offline Risk-sensitive RL with Partial Observability to Enhance Performance in Human-Robot Teaming	58
Giorgio Angelotti (<i>ANITI, Fédération ENAC ISAE-SUPAERO ONERA, Université de Toulouse</i>), Caroline P. C. Chanel (<i>ANITI, Fédération ENAC ISAE-SUPAERO ONERA, Université de Toulouse</i>), Adam Henrique Moreira Pinto (<i>Fédération ENAC ISAE-SUPAERO ONERA, Université de Toulouse</i>), Christophe Lounis (<i>Fédération ENAC ISAE-SUPAERO ONERA, Université de Toulouse</i>), Corentin Chaffaut (<i>Fédération ENAC ISAE-SUPAERO ONERA, Université de Toulouse</i>), Nicolas Drougard (<i>ANITI, Fédération ENAC ISAE-SUPAERO ONERA, Université de Toulouse</i>)	
• Collective Robustness of Heterogeneous Decision-Makers Against Stubborn Individuals	68
Nemanja Antonic (<i>IRIDIA, Université Libre de Bruxelles, DEIB, Politecnico di Milano, & naXys, Université de Namur</i>), Raina Zakir (<i>IRIDIA, Université Libre de Bruxelles</i>), Marco Dorigo (<i>IRIDIA, Université Libre de Bruxelles</i>), Andreagioanni Reina (<i>IRIDIA, Université Libre de Bruxelles & CASCB, Max Planck Institute of Animal Behavior, University of Konstanz</i>)	
• Willy Wonka Mechanisms	78
Thomas Archbold (<i>King's College London</i>), Bart de Keijzer (<i>King's College London</i>), Carmine Ventre (<i>King's College London</i>)	
• Extended Ranking Mechanisms for the m-Capacitated Facility Location Problem in Bayesian Mechanism Design	87
Gennaro Auricchio (<i>University of Bath</i>), Jie Zhang (<i>University of Bath</i>), Mengxiao Zhang (<i>Durham University</i>)	
• Stability of Weighted Majority Voting under Estimated Weights	96
Shaojie Bai (<i>Zhejiang University</i>), Dongxia Wang (<i>Zhejiang University & ZJU-Hangzhou Global Scientific and Technological Innovation Center</i>), Tim Muller (<i>University of Nottingham</i>), Peng Cheng (<i>Zhejiang University</i>), Jiming Chen (<i>Zhejiang University</i>)	
• Impact of Tie-Breaking on the Manipulability of Elections	105
James P. Bailey (<i>Rensselaer Polytechnic Institute</i>), Craig A. Tovey (<i>Georgia Institute of Technology</i>)	
• Minimax Exploiter: A Data Efficient Approach for Competitive Self-Play	114
Daniel Bairamian (<i>Mila - Quebec AI Institute, McGill University</i>), Philippe Marcotte (<i>Ubisoft Montreal</i>), Joshua Romoff (<i>Ubisoft Montreal</i>), Gabriel Robert (<i>Ubisoft Montreal</i>), Derek Nowrouzezahrai (<i>Mila - Quebec AI Institute, McGill University</i>)	
• Strategic Reasoning under Capacity-constrained Agents	123
Gabriel Ballot (<i>SEIDO Lab, EDF R&D and Télécom Paris, Institut Polytechnique de Paris</i>), Vadim Malvone (<i>LTCl, Télécom Paris, Institut Polytechnique de Paris</i>), Jean Leneutre (<i>LTCl, Télécom Paris, Institut Polytechnique de Paris</i>), Youssef Laarouchi (<i>SEIDO Lab, EDF R&D</i>)	
• Trust in Shapley: A Cooperative Quest for Global Trust in P2P Network	132
Arti Bandhana (<i>Artificial Intelligence Center, Department of Computer Science, Faculty of Electrical Engineering, Czech Technical University in Prague</i>), Tomáš Kroupa (<i>Artificial Intelligence Center, Department of Computer Science, Faculty of Electrical Engineering, Czech Technical University in Prague</i>), Sebastián Garcia (<i>Artificial Intelligence Center, Department of Computer Science, Faculty of Electrical Engineering, Czech Technical University in Prague</i>)	
• A Model-Based Solution to the Offline Multi-Agent Reinforcement Learning Coordination Problem	141
Paul Barde (<i>Mila - Quebec AI Institute, McGill University</i>), Jakob Foerster (<i>University of Oxford</i>), Derek Nowrouzezahrai (<i>Mila - Quebec AI Institute, McGill University</i>), Amy Zhang (<i>University of Texas at Austin & Meta AI - FAIR</i>)	
• Parameterized Guarantees for Almost Envy-Free Allocations	151
Siddharth Barman (<i>Indian Institute of Science</i>), Debajyoti Kar (<i>Indian Institute of Science</i>), Shraddha Pathak (<i>Penn State University</i>)	

• Verification of Stochastic Multi-Agent Systems with Forgetful Strategies	160
Francesco Belardinelli (<i>Imperial College London</i>), Wojtek Jamroga (<i>SnT, University of Luxembourg & ICS, Polish Academy of Sciences</i>), Munyque Mittelmann (<i>University of Naples Federico II</i>), Aniello Murano (<i>University of Naples Federico II</i>)	
• Combining Voting and Abstract Argumentation to Understand Online Discussions	170
Michael Bernreiter (<i>DBAI, TU Wien</i>), Jan Maly (<i>DBAI, TU Wien</i>), Oliviero Nardi (<i>DBAI, TU Wien</i>), Stefan Woltran (<i>DBAI, TU Wien</i>)	
• Monitoring Second-Order Hyperproperties	180
Raven Beutner (<i>CISPA Helmholtz Center for Information Security</i>), Bernd Finkbeiner (<i>CISPA Helmholtz Center for Information Security</i>), Hadar Frenkel (<i>CISPA Helmholtz Center for Information Security</i>), Niklas Metzger (<i>CISPA Helmholtz Center for Information Security</i>)	
• Hyper Strategy Logic	189
Raven Beutner (<i>CISPA Helmholtz Center for Information Security</i>), Bernd Finkbeiner (<i>CISPA Helmholtz Center for Information Security</i>)	
• Optimal Referral Auction Design	198
Rangeet Bhattacharyya (<i>IIT Kanpur</i>), Parvik Dave (<i>IIT Bombay</i>), Palash Dey (<i>IIT Kharagpur</i>), Swaprava Nath (<i>IIT Bombay</i>)	
• On Green Sustainability of Resource Selection Games with Equitable Cost-Sharing	207
Vittorio Bilò (<i>University of Salento</i>), Michele Flammini (<i>Gran Sasso Science Institute & University of Calabria</i>), Gianpiero Monaco (<i>University of Chieti-Pescara</i>), Luca Moscardelli (<i>University of Chieti-Pescara</i>), Cosimo Vinci (<i>University of Salento</i>)	
• An Online Learning Theory of Brokerage	216
Natasa Bolić (<i>University of Ottawa</i>), Tommaso Cesari (<i>University of Ottawa</i>), Roberto Colomboni (<i>University of Milan & IIT</i>)	
• Robust Popular Matchings	225
Martin Bullinger (<i>University of Oxford</i>), Rohith Reddy Gangam (<i>University of California, Irvine</i>), Parnian Shahkar (<i>University of California, Irvine</i>)	
• HELP! Providing Proactive Support in the Presence of Knowledge Asymmetry	234
Turgay Caglar (<i>Colorado State University</i>), Sarath Sreedharan (<i>Colorado State University</i>)	
• On the Complexity of Pareto-Optimal and Envy-Free Lotteries	244
Ioannis Caragiannis (<i>Aarhus University</i>), Kristoffer Arnsfelt Hansen (<i>Aarhus University</i>), Nidhi Rathi (<i>Max Planck Institute for Informatics, University of Saarland</i>)	
• A Distributed Approach for Fault Detection in Swarms of Robots	253
Alessandro Carminati (<i>Politecnico di Milano</i>), Davide Azzalini (<i>Politecnico di Milano</i>), Simone Vantini (<i>Politecnico di Milano</i>), Francesco Amigoni (<i>Politecnico di Milano</i>)	
• Finding Effective Ad Allocations: How to Exploit User History	262
Matteo Castiglioni (<i>Politecnico di Milano</i>), Alberto Latino (<i>Politecnico di Milano</i>), Alberto Marchesi (<i>Politecnico di Milano</i>), Giulia Romano (<i>Politecnico di Milano</i>), Nicola Gatti (<i>Politecnico di Milano</i>), Chokha Palayamkottai (<i>Locify</i>)	
• Obstruction Alternating-time Temporal Logic: A Strategic Logic to Reason about Dynamic Models	271
Davide Catta (<i>Università di Napoli, Federico II</i>), Jean Leneutre (<i>Télécom Paris</i>), Vadim Malvone (<i>Télécom Paris</i>), Aniello Murano (<i>Università di Napoli, Federico II</i>)	
• Aligning Credit for Multi-Agent Cooperation via Model-based Counterfactual Imagination	281
Jiajun Chai (<i>Institute of Automation, Chinese Academy of Sciences & School of Artificial Intelligence, University of Chinese Academy of Sciences</i>), Yuqian Fu (<i>Institute of Automation, Chinese Academy of Sciences & School of Artificial Intelligence, University of Chinese Academy of Sciences</i>), Dongbin Zhao (<i>Institute of Automation, Chinese Academy of Sciences & School of Artificial Intelligence, University of Chinese Academy of Sciences</i>), Yuanheng Zhu (<i>Institute of Automation, Chinese Academy of Sciences & School of Artificial Intelligence, University of Chinese Academy of Sciences</i>)	

• Cooperative Electric Vehicles Planning	290
Jaël Champagne Gareau (<i>Université du Québec à Montréal</i>), Marc-André Lavoie (<i>Cégep du Vieux Montréal</i>), Guillaume Gosset (<i>Université du Québec à Montréal</i>), Éric Beaudry (<i>Université du Québec à Montréal</i>)	
• Think Global, Act Local - Agent-Based Inline Recovery for Airline Operations	299
Yashovardhan S. Chati (<i>Tata Consultancy Services Research</i>), Ramasubramanian Suriyanarayanan (<i>Tata Consultancy Services Research</i>), Arunchandar Vasam (<i>Tata Consultancy Services Research</i>)	
• Deep Anomaly Detection via Active Anomaly Search	308
Chao Chen (<i>National Key Laboratory for Novel Software Technology, School of Artificial Intelligence, Nanjing University</i>), Dawei Wang (<i>Alibaba Group</i>), Feng Mao (<i>Alibaba Group</i>), Jiacheng Xu (<i>National Key Laboratory for Novel Software Technology, School of Artificial Intelligence, Nanjing University</i>), Zongzhang Zhang (<i>National Key Laboratory for Novel Software Technology, School of Artificial Intelligence, Nanjing University</i>), Yang Yu (<i>National Key Laboratory for Novel Software Technology, School of Artificial Intelligence, Nanjing University</i>)	
• Foresight Distribution Adjustment for Off-policy Reinforcement Learning	317
Ruifeng Chen (<i>National Key Laboratory for Novel Software Technology, School of Artificial Intelligence, Nanjing University</i>), Xu-Hui Liu (<i>National Key Laboratory for Novel Software Technology, School of Artificial Intelligence, Nanjing University & Polixir Technologies</i>), Tian-Shuo Liu (<i>National Key Laboratory for Novel Software Technology, School of Artificial Intelligence, Nanjing University & Polixir Technologies</i>), Shengyi Jiang (<i>The University of Hong Kong</i>), Feng Xu (<i>National Key Laboratory for Novel Software Technology, School of Artificial Intelligence, Nanjing University</i>), Yang Yu (<i>National Key Laboratory for Novel Software Technology, School of Artificial Intelligence, Nanjing University & Polixir Technologies</i>)	
• Adaptive Primal-Dual Method for Safe Reinforcement Learning	326
Weiqin Chen (<i>Rensselaer Polytechnic Institute</i>), James Onyejizu (<i>Rensselaer Polytechnic Institute</i>), Long Vu (<i>IBM T.J. Watson Research Center</i>), Lan Hoang (<i>IBM Research</i>), Dharmashankar Subramanian (<i>IBM T.J. Watson Research Center</i>), Koushik Kar (<i>Rensselaer Polytechnic Institute</i>), Sandipan Mishra (<i>Rensselaer Polytechnic Institute</i>), Santiago Paternain (<i>Rensselaer Polytechnic Institute</i>)	
• Boosting Continuous Control with Consistency Policy	335
Yuhui Chen (<i>Institute of Automation, Chinese Academy of Sciences & School of Artificial Intelligence, University of Chinese Academy of Sciences</i>), Haoran Li (<i>Institute of Automation, Chinese Academy of Sciences & School of Artificial Intelligence, University of Chinese Academy of Sciences</i>), Dongbin Zhao (<i>Institute of Automation, Chinese Academy of Sciences & School of Artificial Intelligence, University of Chinese Academy of Sciences</i>)	
• ODEs Learn to Walk: ODE-Net based Data-Driven Modeling for Crowd Dynamics	345
Chen Cheng (<i>Shanghai Jiao Tong University</i>), Jinglai Li (<i>University of Birmingham</i>)	
• Fast and Slow Goal Recognition	354
Mattia Chiari (<i>University of Brescia</i>), Alfonso Emilio Gerevini (<i>University of Brescia</i>), Andrea Loreggia (<i>University of Brescia</i>), Luca Putelli (<i>University of Brescia</i>), Ivan Serina (<i>University of Brescia</i>)	
• Learning a Social Network by Influencing Opinions	363
Dmitry Chistikov (<i>University of Warwick</i>), Luisa Estrada (<i>University of Warwick</i>), Mike Paterson (<i>University of Warwick</i>), Paolo Turrini (<i>University of Warwick</i>)	
• Fairness and Efficiency Trade-off in Two-sided Matching	372
Sung-Ho Cho (<i>Kyushu University</i>), Kei Kimura (<i>Kyushu University</i>), Kiki Liu (<i>Kyushu University</i>), Kwei-guu Liu (<i>Kyushu University</i>), Zhengjie Liu (<i>Kyushu University</i>), Zhaohong Sun (<i>Kyushu University</i>), Kentaro Yahiro (<i>Kyushu University</i>), Makoto Yokoo (<i>Kyushu University</i>)	
• Private Agent-Based Modeling	381
Ayush Chopra (<i>Massachusetts Institute of Technology</i>), Arnau Quera-Bofarull (<i>University of Oxford</i>), Nurullah Giray-Kuru (<i>Massachusetts Institute of Technology</i>), Michael Wooldridge (<i>University of Oxford</i>), Ramesh Raskar (<i>Massachusetts Institute of Technology</i>)	

• flame: A Framework for Learning in Agent-based Models	391
Ayush Chopra (<i>Massachusetts Institute of Technology</i>), Jayakumar Subramanian (<i>Adobe</i>), Balaji Krishnamurthy (<i>Adobe</i>), Ramesh Raskar (<i>Massachusetts Institute of Technology</i>)	
• Multi-Robot Allocation of Assistance from a Shared Uncertain Operator	400
Clarissa Costen (<i>University of Oxford</i>), Anna Gautier (<i>KTH Royal Institute of Technology</i>), Nick Hawes (<i>University of Oxford</i>), Bruno Lacerda (<i>University of Oxford</i>)	
• A Simple 1.5-approximation Algorithm for a Wide Range of Maximum Size Stable Matching Problems	409
Gergely Csáji (<i>HUN-REN Centre for Economic and Regional Studies & ELTE Eötvös Loránd University</i>)	
• Designing Redistribution Mechanisms for Reducing Transaction Fees in Blockchains	416
Sankarshan Damle (<i>IIT, Hyderabad</i>), Manisha Padala (<i>IISc, Bangalore</i>), Sujit Gujar (<i>IIT, Hyderabad</i>)	
• The Parameterized Complexity of Welfare Guarantees in Schelling Segregation	425
Argyrios Deligkas (<i>Royal Holloway, University of London</i>), Eduard Eiben (<i>Royal Holloway, University of London</i>), Tiger-Lily Goldsmith (<i>Royal Holloway, University of London</i>)	
• Toward a Quality Model for Hybrid Intelligence Teams	434
Davide Dell'Anna (<i>Utrecht University</i>), Pradeep K. Murukannaiah (<i>Delft University of Technology</i>), Bernd Dudzik (<i>Delft University of Technology</i>), Davide Grossi (<i>University of Groningen</i>), Catholijn M. Jonker (<i>Delft University of Technology</i>), Catharine Oertel (<i>Delft University of Technology</i>), Pinar Yolum (<i>Utrecht University</i>)	
• Informativeness of Reward Functions in Reinforcement Learning	444
Rati Devidze (<i>MPI-SWS</i>), Parameswaran Kamalaruban (<i>The Alan Turing Institute</i>), Adish Singla (<i>MPI-SWS</i>)	
• Continual Optimistic Initialization for Value-Based Reinforcement Learning	453
Sheelabhadra Dey (<i>Texas A&M University</i>), James Ault (<i>Texas A&M University</i>), Guni Sharon (<i>Texas A&M University</i>)	
• Gerrymandering Planar Graphs	463
Jack Dippel (<i>McGill University</i>), Max Dupré la Tour (<i>McGill University</i>), April Niu (<i>McGill University</i>), Sanjukta Roy (<i>Pennsylvania State University & University of Leeds</i>), Adrian Vetta (<i>McGill University</i>)	
• It Is Among Us: Identifying Adversaries in Ad-hoc Domains using Q-valued Bayesian Estimations	472
Matheus Aparecido Do Carmo Alves (<i>Lancaster University</i>), Amokh Varma (<i>Indian Institute of Technology</i>), Yehia Elkhatib (<i>University of Glasgow</i>), Leandro Soriano Marcolino (<i>Lancaster University</i>)	
• Dynamic Epistemic Logic of Resource Bounded Information Mining Agents	481
Vitaliy Dolgorukov (<i>HSE University</i>), Rustam Galimullin (<i>University of Bergen</i>), Maksim Gladyshev (<i>Utrecht University</i>)	
• Population Synthesis as Scenario Generation for Simulation-based Planning under Uncertainty	490
Joel Dyer (<i>University of Oxford</i>), Arnau Quera-Bofarull (<i>University of Oxford</i>), Nicholas Bishop (<i>University of Oxford</i>), J. Doyne Farmer (<i>University of Oxford</i>), Anisoara Calinescu (<i>University of Oxford</i>), Michael Wooldridge (<i>University of Oxford</i>)	
• Computational Aspects of Distortion	499
Soroush Ebadian (<i>University of Toronto</i>), Aris Filos-Ratsikas (<i>University of Edinburgh</i>), Mohamad Latifian (<i>University of Toronto</i>), Nisarg Shah (<i>University of Toronto</i>)	
• Multi-Agent Reinforcement Learning for Assessing False-Data Injection Attacks on Transportation Networks	508
Taha Eghtesad (<i>Pennsylvania State University</i>), Sirui Li (<i>Massachusetts Institute of Technology</i>), Yevgeniy Vorobeychik (<i>Washington University in St. Louis</i>), Aron Laszka (<i>Pennsylvania State University</i>)	
• Reinforcement Learning in the Wild with Maximum Likelihood-based Model Transfer	516
Hannes Eriksson (<i>Zenseact & Chalmers University of Technology</i>), Tommy Tram (<i>Zenseact & Chalmers University of Technology</i>), Debabrota Basu (<i>Univ. Lille, Inria, CNRS & Centrale Lille, UMR 9189 – CRISTAL</i>), Mina Alibeigi (<i>Zenseact</i>), Christos Dimitrakakis (<i>University of Oslo & University of Neuchatel</i>)	
• Holonic Learning: A Flexible Agent-based Distributed Machine Learning Framework	525
Ahmad Esmaeili (<i>Purdue University</i>), Zahra Ghorrati (<i>Purdue University</i>), Eric T. Matson (<i>Purdue University</i>)	

• Learning and Calibrating Heterogeneous Bounded Rational Market Behaviour with Multi-agent Reinforcement Learning	534
Benjamin Patrick Evans (<i>J.P. Morgan AI Research</i>), Sumitra Ganesh (<i>J.P. Morgan AI Research</i>)	
• High-Level, Collaborative Task Planning Grammar and Execution for Heterogeneous Agents	544
Amy Fang (<i>Cornell University</i>), Hadas Kress-Gazit (<i>Cornell University</i>)	
• Facility Location Games with Fractional Preferences and Limited Resources	553
Jiazhu Fang (<i>Ocean University of China</i>), Wenjing Liu (<i>Ocean University of China</i>)	
• Generalized Strategy Synthesis of Infinite-state Impartial Combinatorial Games via Exact Binary Classification	562
Liangda Fang (<i>Jinan University & Pazhou Lab</i>), Meihong Yang (<i>Jinan University</i>), Dingliang Cheng (<i>Jinan University</i>), Yunlai Hao (<i>Jinan University</i>), Quanlong Guan (<i>Jinan University</i>), Liping Xiong (<i>Wuyi University</i>)	
• Probabilistic Multi-agent Only-Believing	571
Qihui Feng (<i>RWTH Aachen University</i>), Gerhard Lakemeyer (<i>RWTH Aachen University</i>)	
• Preventing Deadlocks for Multi-Agent Pickup and Delivery in Dynamic Environments	580
Benedetta Flammini (<i>Politecnico di Milano</i>), Davide Azzalini (<i>Politecnico di Milano</i>), Francesco Amigoni (<i>Politecnico di Milano</i>)	
• Potential-Based Reward Shaping for Intrinsic Motivation	589
Grant C. Forbes (<i>North Carolina State University</i>), Nitish Gupta (<i>North Carolina State University</i>), Leonardo Villalobos-Arias (<i>North Carolina State University</i>), Colin M. Potts (<i>North Carolina State University</i>), Arnav Jhala (<i>North Carolina State University</i>), David L. Roberts (<i>North Carolina State University</i>)	
• Learning Complex Teamwork Tasks using a Given Sub-task Decomposition	598
Elliot Fosong (<i>University of Edinburgh</i>), Arrasy Rahman (<i>University of Texas at Austin</i>), Ignacio Carlucho (<i>Heriot-Watt University</i>), Stefano V. Albrecht (<i>University of Edinburgh</i>)	
• BrainSLAM: SLAM on Neural Population Activity Data	607
Kipp Freud (<i>University of Bristol</i>), Nathan Lepora (<i>University of Bristol</i>), Matt W. Jones (<i>University of Bristol</i>), Cian O'Donnell (<i>Ulster University</i>)	
• From Market Saturation to Social Reinforcement: Understanding the Impact of Non-Linearity in Information Diffusion Models	614
Tobias Friedrich (<i>Hasso Plattner Institute, University of Potsdam</i>), Andreas Göbel (<i>Hasso Plattner Institute, University of Potsdam</i>), Nicolas Klodt (<i>Hasso Plattner Institute, University of Potsdam</i>), Martin S. Krejca (<i>Laboratoire d'Informatique (LIX), CNRS, École Polytechnique, Institut Polytechnique de Paris</i>), Marcus Pappik (<i>Hasso Plattner Institute, University of Potsdam</i>)	
• Analysing the Sample Complexity of Opponent Shaping	623
Kitty Fung (<i>University of Oxford</i>), Qizhen Zhang (<i>University of Oxford</i>), Chris Lu (<i>University of Oxford</i>), Jia Wan (<i>Massachusetts Institute of Technology</i>), Timon Willi (<i>University of Oxford</i>), Jakob Foerster (<i>University of Oxford</i>)	
• RACCER: Towards Reachable and Certain Counterfactual Explanations for Reinforcement Learning	632
Jasmina Gajcin (<i>Trinity College Dublin</i>), Ivana Dusparic (<i>Trinity College Dublin</i>)	
• Surge Routing: Event-informed Multiagent Reinforcement Learning for Autonomous Rideshare	641
Daniel Garces (<i>Harvard University</i>), Stephanie Gil (<i>Harvard University</i>)	
• Incentives for Early Arrival in Cooperative Games	651
Yaixin Ge (<i>ShanghaiTech University</i>), Yao Zhang (<i>ShanghaiTech University</i>), Dengji Zhao (<i>ShanghaiTech University</i>), Zhihao Gavin Tang (<i>Shanghai University of Finance and Economics</i>), Hu Fu (<i>Shanghai University of Finance and Economics</i>), Pinyan Lu (<i>Shanghai University of Finance and Economics</i>)	
• Deep Reinforcement Learning with Coalition Action Selection for Online Combinatorial Resource Allocation with Arbitrary Action Space	660
Tesfay Zemuy Gebrekidan (<i>University of Southampton</i>), Sebastian Stein (<i>University of Southampton</i>), Timothy J. Norman (<i>University of Southampton</i>)	

• Approximating the Core via Iterative Coalition Sampling	669
Ian Gemp (<i>Google DeepMind</i>), Marc Lanctot (<i>Google DeepMind</i>), Luke Marris (<i>Google DeepMind</i>), Yiran Mao (<i>Google DeepMind</i>), Edgar Duéñez-Guzmán (<i>Google DeepMind</i>), Sarah Perrin (<i>Google DeepMind</i>), Andras Gyorgy (<i>Google DeepMind</i>), Romuald Elie (<i>Google DeepMind</i>), Georgios Piliouras (<i>Google DeepMind</i>), Michael Kaisers (<i>Google DeepMind</i>), Daniel Hennes (<i>Google DeepMind</i>), Kalesha Bullard (<i>Google DeepMind</i>), Kate Larson (<i>Google DeepMind</i>), Yoram Bachrach (<i>Google DeepMind</i>)	
• Modelling the Rise and Fall of Two-sided Markets	679
Farnoud Ghasemi (<i>Faculty of Mathematics and Computer Science, Jagiellonian University</i>), Rafał Kucharski (<i>Faculty of Mathematics and Computer Science, Jagiellonian University</i>)	
• NovelGym: A Flexible Ecosystem for Hybrid Planning and Learning Agents Designed for Open Worlds	688
Shivam Goel (<i>Tufts University</i>), Yichen Wei (<i>Brown University</i>), Panagiotis Lymperopoulos (<i>Tufts University</i>), Klára Churá (<i>Tufts University</i>), Matthias Scheutz (<i>Tufts University</i>), Jivko Sinapov (<i>Tufts University</i>)	
• Capacity Modification in the Stable Matching Problem	697
Salil Gokhale (<i>Indian Institute of Technology Delhi</i>), Samarth Singla (<i>Indian Institute of Technology Delhi</i>), Shivika Narang (<i>Simons Laufer Mathematical Science Institute</i>), Rohit Vaish (<i>Indian Institute of Technology Delhi</i>)	
• Nash Stability in Hedonic Skill Games	706
Laurent Gourves (<i>Université Paris Dauphine-PSL, CNRS, LAMSADE</i>), Gianpiero Monaco (<i>University of Chieti-Pescara</i>)	
• Symbolic Computation of Sequential Equilibria	715
Moritz Graf (<i>University of Freiburg</i>), Thorsten Engesser (<i>IRIT</i>), Bernhard Nebel (<i>University of Freiburg</i>)	
• Reinforcement Learning with Ensemble Model Predictive Safety Certification	724
Sven Gronauer (<i>Technical University of Munich (TUM)</i>), Tom Haider (<i>Fraunhofer IKS</i>), Felippe Schmoeller da Roza (<i>Fraunhofer IKS</i>), Klaus Diepold (<i>Technical University of Munich (TUM)</i>)	
• MaDi: Learning to Mask Distractions for Generalization in Visual Deep Reinforcement Learning	733
Bram Grooten (<i>Eindhoven University of Technology</i>), Tristan Tomilin (<i>Eindhoven University of Technology</i>), Gautham Vasani (<i>University of Alberta</i>), Matthew E. Taylor (<i>University of Alberta & Alberta Machine Intelligence Institute (Amii)</i>), A. Rupam Mahmood (<i>University of Alberta & Alberta Machine Intelligence Institute (Amii)</i>), Meng Fang (<i>University of Liverpool</i>), Mykola Pechenizkiy (<i>Eindhoven University of Technology</i>), Decebal Constantin Mocanu (<i>University of Luxembourg</i>)	
• Cost-aware Offline Safe Meta Reinforcement Learning with Robust In-Distribution Online Task Adaptation	743
Cong Guan (<i>Nanjing University</i>), Ruiqi Xue (<i>Nanjing University</i>), Ziqian Zhang (<i>Nanjing University</i>), Lihe Li (<i>Nanjing University</i>), Yi-Chen Li (<i>Nanjing University</i>), Lei Yuan (<i>Nanjing University</i>), Yang Yu (<i>Nanjing University</i>)	
• Cooperation and Coordination in Heterogeneous Populations with Interaction Diversity	752
Hao Guo (<i>Tsinghua University</i>), Zhen Wang (<i>Northwestern Polytechnical University</i>), Junliang Xing (<i>Tsinghua University</i>), Pin Tao (<i>Tsinghua University</i>), Yuanchun Shi (<i>Tsinghua University</i>)	
• First 100 days of Pandemic: An Interplay of Pharmaceutical, Behavioral and Digital Interventions - A Study using Agent Based Modeling	761
Gauri Gupta (<i>Massachusetts Institute of Technology</i>), Ritvik Kapila (<i>University of California San Diego</i>), Ayush Chopra (<i>Massachusetts Institute of Technology</i>), Ramesh Raskar (<i>Massachusetts Institute of Technology</i>)	
• Causal Explanations for Sequential Decision-Making in Multi-Agent Systems	771
Balint Gyevnar (<i>University of Edinburgh</i>), Cheng Wang (<i>University of Edinburgh</i>), Christopher G. Lucas (<i>University of Edinburgh</i>), Shay B. Cohen (<i>University of Edinburgh</i>), Stefano V. Albrecht (<i>University of Edinburgh</i>)	
• Weighted Proportional Allocations of Indivisible Goods and Chores: Insights via Matchings	780
Vishwa Prakash H.V. (<i>Chennai Mathematical Institute</i>), Prajakta Nimbhorkar (<i>Chennai Mathematical Institute</i>)	
• Sample and Communication Efficient Fully Decentralized MARL Policy Evaluation via a New Approach: Local TD Update	789
Hairi (<i>University of Wisconsin-Whitewater</i>), Zifan Zhang (<i>North Carolina State University</i>), Jia Liu (<i>The Ohio State University</i>)	

- **Forecasting and Mitigating Disruptions in Public Bus Transit Services**..... 798
Chaeun Han (*Pennsylvania State University*), Jose Paolo Talusan (*Vanderbilt University*),
Dan Freudberg (*WeGo Public Transit*), Ayan Mukhopadhyay (*Vanderbilt University*),
Abhishek Dubey (*Vanderbilt University*), Aron Laszka (*Pennsylvania State University*)
- **Solving Two-player Games with QBF Solvers in General Game Playing**..... 807
Yifan He (*UNSW Sydney*), Abdallah Saffidine (*UNSW Sydney*), Michael Thielscher (*UNSW Sydney*)
- **Facility Location Games with Scaling Effects** 816
Yu He (*City University of Hong Kong*), Alexander Lam (*City University of Hong Kong*),
Minming Li (*City University of Hong Kong*)
- **Tight Approximations for Graphical House Allocation** 825
Hadi Hosseini (*Penn State University*), Andrew McGregor (*UMass Amherst*), Rik Sengupta (*UMass Amherst*),
Rohit Vaish (*IIT Delhi*), Vignesh Viswanathan (*UMass Amherst*)
- **Measuring Policy Distance for Multi-Agent Reinforcement Learning** 834
Tianyi Hu (*Institute of Automation, CAS & School of Artificial Intelligence, UCAS*),
Zhiqiang Pu (*Institute of Automation, CAS & School of Artificial Intelligence, UCAS*),
Xiaolin Ai (*Institute of Automation, CAS*), Tenghai Qiu (*Institute of Automation, CAS*),
Jianqiang Yi (*Institute of Automation, CAS & School of Artificial Intelligence, UCAS*)
- **Applying Opponent Modeling for Automatic Bidding in Online Repeated Auctions**..... 843
Yudong Hu (*University of Chinese Academy of Sciences*),
Congying Han (*University of Chinese Academy of Sciences*), Tiande Guo (*University
of Chinese Academy of Sciences*),
Hao Xiao (*Institute of Electrical Engineering, Chinese Academy of Sciences*)
- **Keeping the Harmony Between Neighbors: Local Fairness in Graph Fair Division** 852
Halvard Hummel (*Norwegian University of Science and Technology*), Ayumi Igarashi (*University of Tokyo*)
- **On the Stability of Learning in Network Games with Many Players**..... 861
Aamal Hussain (*Imperial College London*), Dan Leonte (*Imperial College London*),
Francesco Belardinelli (*Imperial College London*), Georgios Piliouras (*Singapore University
of Technology and Design*)
- **Rational Verification with Quantitative Probabilistic Goals**..... 871
David Hyland (*University of Oxford*), Julian Gutierrez (*Monash University*),
Krishna Shankaranarayanan (*IIT Bombay*), Michael Wooldridge (*University of Oxford*)
- **BDI Agents in Natural Language Environments**..... 880
Alexandre Yukio Ichida (*Pontifical Catholic University of Rio*),
Felipe Meneguzzi (*University of Aberdeen & Pontifical Catholic University of Rio*),
Rafael C. Cardoso (*University of Aberdeen*)
- **A Cloud-Based Microservices Solution for Multi-Agent Traffic Control Systems** 889
Chikadibia Ihejimba (*The University of Texas at Dallas*), Rym Z. Wenkstern (*The University of Texas at Dallas*)
- **Is Limited Information Enough? An Approximate Multi-agent Coverage Control
in Non-Convex Discrete Environments**..... 898
Tatsuya Iwase (*Toyota Motor Europe NV/SA*), Aurélie Beynier (*Sorbonne Université, CNRS LIP6*),
Nicolas Bredeche (*Sorbonne Université, CNRS ISIR*), Nicolas Maudet (*Sorbonne Université, CNRS LIP6*),
Jason R. Marden (*University of California, Santa Barbara*)
- **Towards a Principle-based Framework for Repair Selection in Inconsistent
Knowledge Bases**..... 907
Said Jabbour (*CRIL, CNRS UMR 8188, Université d'Artois*),
Yue Ma (*LISN, CNRS UMR 9015, Université Paris-Saclay*),
Badran Raddaoui (*SAMOVAR, Télécom SudParis, Institut Polytechnique de Paris*)
- **Unraveling the Tapestry of Deception and Personality: A Deep Dive into Multi-Issue
Human-Agent Negotiation Dynamics** 916
Nusrath Jahan (*University of Central Florida*), Johnathan Mell (*University of Central Florida*)
- **Playing Quantitative Games Against an Authority: On the Module Checking Problem**..... 926
Wojciech Jamroga (*SnT, University of Luxembourg & ICS, Polish Academy of Sciences*),
Munyque Mittelmann (*University of Naples Federico II*), Aniello Murano (*University of Naples Federico II*),
Giuseppe Perelli (*Sapienza University of Rome*)

• Discovering Consistent Subelections	935
Łukasz Janeczko (AGH University), Jérôme Lang (CNRS), Grzegorz Lisowski (AGH University), Stanisław Szufa (AGH University),	
• Disentangling Policy from Offline Task Representation Learning via Adversarial Data Augmentation	944
Chengxing Jia (National Key Laboratory for Novel Software Technology, School of Artificial Intelligence, Nanjing University & Polixir Technologies), Fuxiang Zhang (National Key Laboratory for Novel Software Technology, School of Artificial Intelligence, Nanjing University), Yi-Chen Li (National Key Laboratory for Novel Software Technology, School of Artificial Intelligence, Nanjing University & Polixir Technologies), Chen-Xiao Gao (National Key Laboratory for Novel Software Technology, School of Artificial Intelligence, Nanjing University), Xu-Hui Liu (National Key Laboratory for Novel Software Technology, School of Artificial Intelligence, Nanjing University & Polixir Technologies), Lei Yuan (National Key Laboratory for Novel Software Technology, School of Artificial Intelligence, Nanjing University & Polixir Technologies), Zongzhang Zhang (National Key Laboratory for Novel Software Technology, School of Artificial Intelligence, Nanjing University), Yang Yu (National Key Laboratory for Novel Software Technology, School of Artificial Intelligence, Nanjing University & Polixir Technologies)	
• Recourse under Model Multiplicity via Argumentative Ensembling	954
Junqi Jiang (Imperial College London), Francesco Leofante (Imperial College London), Antonio Rago (Imperial College London), Francesca Toni (Imperial College London)	
• Decentralized Federated Policy Gradient with Byzantine Fault-Tolerance and Provably Fast Convergence	964
Philip Jordan (ETH Zürich), Florian Grötschla (ETH Zürich), Flint Xiaofeng Fan (National University of Singapore), Roger Wattenhofer (ETH Zürich)	
• Safe Model-Based Multi-Agent Mean-Field Reinforcement Learning	973
Matej Jusup (ETH Zurich), Barna Pásztor (ETH Zurich), Tadeusz Janik (ETH Zurich), Kenan Zhang (EPFL), Francesco Corman (ETH Zurich), Andreas Krause (ETH Zurich), Ilija Bogunovic (University College London)	
• To Lead or to be Led: A Generalized Condorcet Jury Theorem under Dependence	983
Jonas Karge (TU Dresden), Juliette-Michelle Burkhardt (TU Dresden), Sebastian Rudolph (TU Dresden), Dominik Rusovac (TU Dresden)	
• Efficient Method for Finding Optimal Strategies in Chopstick Auctions with Uniform Objects Values	992
Stanisław Kaźmierowski (University of Warsaw), Marcin Dziubiński (University of Warsaw)	
• Scaling Opponent Shaping to High Dimensional Games	1001
Akbar Khan (University College London), Timon Willi (University Of Oxford), Newton Kwan (University College London), Andrea Tacchetti (Deepmind), Chris Lu (University Of Oxford), Edward Grefenstette (University College London), Tim Rocktäschel (University College London), Jakob Foerster (University of Oxford)	
• Catfished! Impacts of Strategic Misrepresentation in Online Dating	1011
Oz Kilic (Carleton University), Alan Tsang (Carleton University)	
• Veto Core Consistent Preference Aggregation	1020
Aleksy Y. Kondratev (HSE University), Egor Ianovski (Unaffiliated)	
• Fine-Grained Liquid Democracy for Cumulative Ballots	1029
Matthias Köppe (University of California), Martin Koutecký (Charles University), Krzysztof Sornat (University of Wrocław), Nimrod Talmon (Ben-Gurion University of the Negev)	
• Minimizing State Exploration While Searching Graphs with Unknown Obstacles	1038
Daniel Koyfman (Ben-Gurion University), Shahaf S. Shperberg (Ben-Gurion University), Dor Atzmon (Bar-Ilan University), Ariel Felner (Ben-Gurion University)	
• Continuous Monte Carlo Graph Search	1047
Kalle Kujanpää (Aalto University), Amin Babadi (Bugbear Entertainment & Aalto University), Yi Zhao (Aalto University), Juho Kannala (Aalto University), Alexander Ilin (Aalto University, System 2 AI), Joni Pajarinen (Aalto University)	

- **Approximating APS Under Submodular and XOS Valuations with Binary Marginals** 1057
Pooja Kulkarni (*University of Illinois at Urbana-Champaign*),
Rucha Kulkarni (*University of Illinois at Urbana-Champaign*),
Ruta Mehta (*University of Illinois at Urbana-Champaign*)
- **Higher Order Reasoning under Intent Uncertainty Reinforces the Hobbesian Trap**..... 1066
Otto Kuusela (*University of Amsterdam*), Debraj Roy (*University of Amsterdam*)
- **Proportional Fairness in Obnoxious Facility Location** 1075
Alexander Lam (*City University of Hong Kong*), Haris Aziz (*UNSW Sydney*),
Bo Li (*Hong Kong Polytechnic University*), Fahimeh Ramezani (*UNSW Sydney*), Toby Walsh (*UNSW Sydney*)
- **Beyond Surprise: Improving Exploration Through Surprise Novelty**..... 1084
Hung Le (*Deakin University*), Kien Do (*Deakin University*), Dung Nguyen (*Deakin University*),
Svetha Venkatesh (*Deakin University*)
- **Policy Learning for Off-Dynamics RL with Deficient Support** 1093
Linh Le Pham Van (*Applied Artificial Intelligence Institute, Deakin University*),
Hung The Tran (*Applied Artificial Intelligence Institute, Deakin University*),
Sunil Gupta (*Applied Artificial Intelligence Institute, Deakin University*)
- **The Stochastic Evolutionary Dynamics of Softmax Policy Gradient in Games**..... 1101
Chin-wing Leung (*University of Warwick*), Shuyue Hu (*Shanghai Artificial Intelligence Laboratory*),
Ho-fung Leung (*Independent Researcher*)
- **Learning Partner Selection Rules that Sustain Cooperation in Social Dilemmas
with the Option of Opting Out** 1110
Chin-wing Leung (*University of Warwick*), Paolo Turrini (*University of Warwick*)
- **Coalition Formation with Bounded Coalition Size**..... 1119
Chaya Levinger (*Ariel University*), Noam Hazon (*Ariel University*), Sofia Simola (*Technische Universität Wien*),
Amos Azaria (*Ariel University*)
- **Bounding the Incentive Ratio of the Probabilistic Serial Rule** 1128
Bo Li (*Hong Kong Polytechnic University*), Ankang Sun (*Hong Kong Polytechnic University*),
Shiji Xing (*Hong Kong Polytechnic University*)
- **Normalization Enhances Generalization in Visual Reinforcement Learning** 1137
Lu Li (*Tsinghua University*), Jiafei Lyu (*Tsinghua University*), Guozheng Ma (*Tsinghua University*),
Zilin Wang (*Tsinghua University*), Zhenjie Yang (*Shanghai Jiao Tong University*), Xiu Li (*Tsinghua University*),
Zhiheng Li (*Tsinghua University*)
- **Grasper: A Generalist Pursuer for Pursuit-Evasion Problems**..... 1147
Pengdeng Li (*Nanyang Technological University*), Shuxin Li (*Nanyang Technological University*),
Xinrun Wang (*Nanyang Technological University*), Jakub Černý (*Columbia University*),
Youzhi Zhang (*CAIR, HKISI, CAS*), Stephen McAleer (*Carnegie Mellon University*),
Hau Chan (*University of Nebraska-Lincoln*), Bo An (*Nanyang Technological University*)
- **Context-aware Communication for Multi-agent Reinforcement Learning**..... 1156
Xinran Li (*The Hong Kong University of Science and Technology*),
Jun Zhang (*The Hong Kong University of Science and Technology*)
- **Factor Graph Neural Network Meets Max-Sum: A Real-Time Route Planning
Algorithm for Massive-Scale Trips**..... 1165
Yixuan Li (*Southeast University*), Wanyuan Wang (*Southeast University*), Weiyi Xu (*Southeast University*),
Yanchen Deng (*Nanyang Technological University*), Weiwei Wu (*Southeast University*)
- **Developing a Multi-agent and Self-adaptive Framework with Deep Reinforcement
Learning for Dynamic Portfolio Risk Management**..... 1174
Zhenglong Li (*The University of Hong Kong*), Vincent Tam (*The University of Hong Kong*),
Kwan L. Yeung (*The University of Hong Kong*)
- **A Complete Landscape for the Price of Envy-Freeness** 1183
Zihao Li (*Nanyang Technological University*), Shengxin Liu (*Harbin Institute of Technology, Shenzhen*),
Xinhang Lu (*UNSW Sydney*), Biaoshuai Tao (*Shanghai Jiao Tong University*),
Yichen Tao (*University of Michigan*)
- **Episodic Reinforcement Learning with Expanded State-reward Space** 1192
Dayang Liang (*Xiamen University*), Yaru Zhang (*Xiamen University*), Yunlong Liu (*Xiamen University*)

- **Policy-regularized Offline Multi-objective Reinforcement Learning**..... 1201
Qian Lin (*Sun Yat-sen University*), Chao Yu (*Sun Yat-sen University*), Zongkai Liu (*Sun Yat-sen University*),
Zifan Wu (*Sun Yat-sen University*)
- **Progression with Probabilities in the Situation Calculus: Representation and Succinctness** 1210
Daxin Liu (*The University of Edinburgh*), Vaishak Belle (*The University of Edinburgh*)
- **LLM-Powered Hierarchical Language Agent for Real-time Human-AI Coordination**..... 1219
Jijia Liu (*Tsinghua University & SIGS*), Chao Yu (*Tsinghua University*), Jiaxuan Gao (*Tsinghua University*),
Yuqing Xie (*Tsinghua University*), Qingmin Liao (*Tsinghua University & SIGS*),
Yi Wu (*Tsinghua University & Shanghai Qi Zhi Institute*), Yu Wang (*Tsinghua University*)
- **A Trajectory Perspective on the Role of Data Sampling Techniques in Offline Reinforcement Learning**..... 1229
Jinyi Liu (*College of Intelligence and Computing, Tianjin University*),
Yi Ma (*College of Intelligence and Computing, Tianjin University*),
Jianye Hao (*College of Intelligence and Computing, Tianjin University*), Yujing Hu (*NetEase Fuxi AI Lab*),
Yan Zheng (*College of Intelligence and Computing, Tianjin University*), Tangjie Lv (*NetEase Fuxi AI Lab*),
Changjie Fan (*NetEase Fuxi AI Lab*)
- **2D-Ptr: 2D Array Pointer Network for Solving the Heterogeneous Capacitated Vehicle Routing Problem**..... 1238
Qidong Liu (*Zhengzhou University & National Supercomputing Center in Zhengzhou*),
Chaoyue Liu (*Zhengzhou University*), Shaoyao Niu (*Zhengzhou University*),
Cheng Long (*Nanyang Technological University*), Jie Zhang (*Nanyang Technological University*),
Mingliang Xu (*Zhengzhou University & National Supercomputing Center in Zhengzhou*)
- **Neural Population Learning beyond Symmetric Zero-Sum Games** 1247
Siqi Liu (*Google DeepMind & University College London*),
Luke Marris (*Google DeepMind & University College London*), Marc Lanctot (*Google DeepMind*),
Georgios Piliouras (*Google DeepMind*), Joel Z. Leibo (*Google DeepMind*), Nicolas Heess (*Google DeepMind*)
- **GraphSAID: Graph Sampling via Attention based Integer Programming Method**..... 1256
Ziqi Liu (*New York University Center for Data Science*), Laurence Liu (*FCC Analytics*)
- **Uncoupled Learning of Differential Stackelberg Equilibria with Commitments**..... 1265
Robert Loftin (*The University of Sheffield*), Mustafa Mert Çelikok (*Delft University of Technology*),
Herke van Hoof (*University of Amsterdam*), Samuel Kaski (*Aalto University & The University of Manchester*),
Frans A. Oliehoek (*Delft University of Technology*)
- **Safe Reinforcement Learning with Free-form Natural Language Constraints and Pre-Trained Language Models** 1274
Xingzhou Lou (*School of Artificial Intelligence, UCAS & Institute of Automation, CAS*),
Junge Zhang (*School of Artificial Intelligence, UCAS & Institute of Automation, CAS*),
Ziyan Wang (*King's College London*),
Kaiqi Huang (*School of Artificial Intelligence, UCAS & Institute of Automation, CAS*),
Yali Du (*King's College London*)
- **DuaLight: Enhancing Traffic Signal Control by Leveraging Scenario-Specific and Scenario-Shared Knowledge**..... 1283
Jiaming Lu (*SenseTime Research & ISTBI of Fudan University*), Jingqing Ruan (*SenseTime Research*),
Haoyuan Jiang (*SenseTime Research & Baidu Inc.*), Ziyue Li (*University of Cologne & EWI gGmbH*),
Hangyu Mao (*SenseTime Research*),
Rui Zhao (*SenseTime Research & Qing Yuan Research Institute of Shanghai Jiao Tong University*)
- **A Task-Driven Multi-UAV Coalition Formation Mechanism** 1292
Xinpeng Lu (*Yangzhou University*), Heng Song (*Nanjing University of Information Science and Technology*),
Huailing Ma (*Yangzhou University*), Junwu Zhu (*Yangzhou University*)
- **Act as You Learn: Adaptive Decision-Making in Non-Stationary Markov Decision Processes** 1301
Baiting Luo (*Vanderbilt University*), Yunuo Zhang (*Vanderbilt University*),
Abhishek Dubey (*Vanderbilt University*), Ayan Mukhopadhyay (*Vanderbilt University*)
- **Oh, Now I See What You Want: Learning Agent Models with Internal States from Observations** 1310
Panagiotis Lymperopoulos (*Tufts University*), Matthias Scheutz (*Tufts University*)

- **Covert Planning against Imperfect Observers** 1319
 Haoxiang Ma (*University of Florida*), Chongyang Shi (*University of Florida*),
 Shuo Han (*University of Illinois Chicago*), Michael R. Dorothy (*DEVCOM Army Research Laboratory*),
 Jie Fu (*University of Florida*)
- **Mixed-Initiative Bayesian Sub-Goal Optimization in Hierarchical Reinforcement Learning** 1328
 Haozhe Ma (*National University of Singapore*), Thanh Vinh Vo (*National University of Singapore*),
 Tze-Yun Leong (*National University of Singapore*)
- **Attacking Multi-Player Bandits and How to Robustify Them** 1337
 Shivakumar Mahesh (*University of Oxford*), Anshuka Rangì (*Amazon*), Haifeng Xu (*University of Chicago*),
 Long Tran-Thanh (*University of Warwick*)
- **Explaining the Behavior of POMDP-based Agents Through the Impact of Counterfactual Information**..... 1346
 Saaduddin Mahmud (*University of Massachusetts Amherst*),
 Marcell Vazquez-Chanlatte (*Nissan Advanced Technology Center Silicon Valley*),
 Stefan Witwicki (*Nissan Advanced Technology Center Silicon Valley*),
 Shlomo Zilberstein (*University of Massachusetts Amherst*)
- **Bayesian Behavioural Model Estimation for Live Crowd Simulation**..... 1355
 Fumiyasu Makinoshima (*Fujitsu Limited*), Tetsuro Takahashi (*Fujitsu Limited*),
 Yusuke Oishi (*Kyushu University*)
- **PDiT: Interleaving Perception and Decision-making Transformers for Deep Reinforcement Learning**..... 1363
 Hangyu Mao (*SenseTime Research*), Rui Zhao (*SenseTime Research*), Ziyue Li (*University of Cologne*),
 Zhiwei Xu (*Institute of Automation, Chinese Academy of Sciences*),
 Hao Chen (*University of Chinese Academy of Sciences*),
 Yiqun Chen (*Gaojing School of AI, Renmin University of China*),
 Bin Zhang (*Institute of Automation, Chinese Academy of Sciences*), Zhen Xiao (*Peking University*),
 Junge Zhang (*Institute of Automation, Chinese Academy of Sciences*),
 Jiangjin Yin (*Huazhong Agricultural University*)
- **Network Agency: An Agent-based Model of Forced Migration from Ukraine** 1372
 Zakaria Mehrab (*University of Virginia*), Logan Stundal (*University of Virginia*),
 Sarmath Swarup (*University of Virginia*), Srinivasan Venaktramanan (*University of Virginia*),
 Bryan Lewis (*University of Virginia*), Henning Mortveit (*University of Virginia*),
 Christopher Barrett (*University of Virginia*), Abhishek Pandey (*Yale School of Public Health*),
 Chad Wells (*Yale School of Public Health*), Alison Galvani (*Yale School of Public Health*),
 Burton Singer (*University of Florida*), David Leblang (*University of Virginia*),
 Rita Colwell (*University of Maryland*), Madhav Marathe (*University of Virginia*)
- **Containing the Spread of a Contagion on a Tree** 1381
 Michela Meister (*Cornell University*), Jon Kleinberg (*Cornell University*)
- **TaxAI: A Dynamic Economic Simulator and Benchmark for Multi-agent Reinforcement Learning**..... 1390
 Qirui Mi (*Institute of Automation, CAS & School of Artificial Intelligence, UCAS*),
 Siyu Xia (*Institute of Automation, CAS & School of Artificial Intelligence, UCAS*),
 Yan Song (*Institute of Automation, CAS*),
 Haifeng Zhang (*Institute of Automation, CAS, School of Artificial Intelligence, UCAS, & Nanjing Artificial Intelligence Research of IA*),
 Shenghao Zhu (*University of International Business and Economics*), Jun Wang (*University College London*)
- **Evaluating District-based Election Surveys with Synthetic Dirichlet Likelihood** 1400
 Adway Mitra (*Indian Institute of Technology*), Palash Dey (*Indian Institute of Technology*)
- **Observer-Aware Planning with Implicit and Explicit Communication** 1409
 Shuwa Miura (*University of Massachusetts Amherst*), Shlomo Zilberstein (*University of Massachusetts Amherst*)
- **PI-NeuGODE: Physics-Informed Graph Neural Ordinary Differential Equations for Spatiotemporal Trajectory Prediction** 1418
 Zhaobin Mo (*Department of Civil Engineering and Engineering Mechanics, Columbia University*),
 Yongjie Fu (*Department of Civil Engineering and Engineering Mechanics, Columbia University*),
 Xuan Di (*Department of Civil Engineering and Engineering Mechanics, Columbia University*)

- **Policy Optimization using Horizon Regularized Advantage to Improve Generalization in Reinforcement Learning** 1427
Nasik Muhammad Nafi (*Kansas State University*), Raja Farrukh Ali (*Kansas State University*), William Hsu (*Kansas State University*), Kevin Duong (*Kansas State University*), Mason Vick (*Kansas State University*)
- **Linking Vision and Multi-Agent Communication through Visible Light Communication using Event Cameras** 1436
Haruyuki Nakagawa (*Tokyo Institute of Technology & Sony Semiconductor Solutions Corporation*), Yoshitaka Miyatani (*Sony Semiconductor Solutions Corporation*), Asako Kanezaki (*Tokyo Institute of Technology*)
- **Rethinking Out-of-Distribution Detection for Reinforcement Learning: Advancing Methods for Evaluation and Detection** 1445
Linus Nasvytis (*Harvard University*), Kai Sandbrink (*University of Oxford*), Jakob Foerster (*University of Oxford*), Tim Franzmeyer (*University of Oxford*), Christian Schroeder de Witt (*University of Oxford*)
- **Mixed-Initiative Human-Robot Teaming under Suboptimality with Online Bayesian Adaptation**..... 1454
Manisha Natarajan (*Georgia Institute of Technology*), Chunyue Xue (*Georgia Institute of Technology*), Sanne van Waveren (*Georgia Institute of Technology*), Karen Feigh (*Georgia Institute of Technology*), Matthew Gombolay (*Georgia Institute of Technology*)
- **Bootstrapping Linear Models for Fast Online Adaptation in Human-Agent Collaboration**.. 1463
Benjamin A. Newman (*Carnegie Mellon University & Meta*), Chris Paxton (*Meta*), Kris Kitani (*Carnegie Mellon University & Meta*), Henny Admoni (*Carnegie Mellon University*)
- **Solution-oriented Agent-based Models Generation with Verifier-assisted Iterative In-context Learning** 1473
Tong Niu (*Center for Brain-Inspired Computing Research, Tsinghua University*), Weihao Zhang (*Lynxi Technologies Co., Ltd.*), Rong Zhao (*Center for Brain-Inspired Computing Research, Tsinghua University*),
- **Reinforcement Learning Interventions on Boundedly Rational Human Agents in Frictionful Tasks** 1482
Eura Nofshin (*Harvard University*), Siddharth Swaroop (*Harvard University*), Weiwei Pan (*Harvard University*), Susan Murphy (*Harvard University*), Finale Doshi-Velez (*Harvard University*)
- **RAISE the Bar: Restriction of Action Spaces for Improved Social Welfare and Equity in Traffic Management** 1492
Michael Oesterle (*University of Mannheim*), Tim Grams (*University of Mannheim*), Christian Bartelt (*University of Mannheim*), Heiner Stuckenschmidt (*University of Mannheim*)
- **Engineering LaCAM*: Towards Real-time, Large-scale, and Near-optimal Multi-agent Pathfinding** 1501
Keisuke Okumura (*University of Cambridge & National Institute of Advanced Industrial Science and Technology (AIST)*)
- **Learning and Sustaining Shared Normative Systems via Bayesian Rule Induction in Markov Games** 1510
Ninell Oldenburg (*University of Copenhagen*), Tan Zhi-Xuan (*Massachusetts Institute of Technology*)
- **Emergent Cooperation under Uncertain Incentive Alignment**..... 1521
Nicole Orzan (*University of Groningen*), Erman Acar (*ILLC & IvI, University of Amsterdam*), Davide Grossi (*University of Groningen*), Roxana Rădulescu (*Vrije Universiteit Brussel & Utrecht University*)
- **A Computational Framework of Human Values**..... 1531
Nardine Osman (*Artificial Intelligence Research Institute (IIIA-CSIC)*), Mark d'Inverno (*Goldsmiths, University of London & Artificial Intelligence Research Institute (IIIA-CSIC)*)
- **Improving Mobile Maternal and Child Health Care Programs: Collaborative Bandits for Time Slot Selection** 1540
Soumyabrata Pal (*Google Research India & Adobe*), Milind Tambe (*Google Research*), Arun Suggala (*Google Research India*), Karthikeyan Shanmugam (*Google Research India*), Aparna Taneja (*Google Research India*)
- **Monitored Markov Decision Processes** 1549
Simone Parisi (*University of Alberta & Ami*), Montaser Mohammedalamen (*University of Alberta*),

Alireza Kazempour (*University of Alberta*), Matthew E. Taylor (*University of Alberta & Ami*),
Michael Bowling (*University of Alberta & Ami*)

- **Confidence-Based Curriculum Learning for Multi-Agent Path Finding** 1558
Thomy Phan (*University of Southern California*), Joseph Driscoll (*Georgia Institute of Technology*),
Justin Romberg (*Georgia Institute of Technology*), Sven Koenig (*University of Southern California*)
- **Single-Winner Voting with Alliances: Avoiding the Spoiler Effect** 1567
Grzegorz Pierczyński (*AGH University*),
Stanisław Szufa (*AGH University & CNRS, LAMSADE, Université Paris Dauphine-PSL*)
- **Simultaneously Achieving Group Exposure Fairness and Within-Group Meritocracy
in Stochastic Bandits** 1576
Subham Pokhriyal (*Indian Institute of Technology Ropar*), Shweta Jain (*Indian Institute of Technology Ropar*),
Ganesh Ghalme (*Indian Institute of Technology Hyderabad*),
Swapnil Dhamal (*Indian Institute of Technology Ropar*),
Sujit Gujar (*International Institute of Information Technology, Hyderabad*)
- **Atlas-X Equity Financing: Unlocking New Methods to Securely Obfuscate Axe
Inventory Data Based on Differential Privacy** 1585
Antigoni Polychroniadou (*J.P. Morgan AI Research & AlgoCRYPT CoE*),
Gabriele Ciprianni (*J.P. Morgan Quantitative Research*), Richard Hua (*J.P. Morgan Quantitative Research*),
Tucker Balch (*J.P. Morgan AI Research*)
- **Robust Knowledge Extraction from Large Language Models using Social Choice Theory ...** 1593
Nico Potyka (*Cardiff University*), Yuqicheng Zhu (*Bosch Center of AI & Univ. of Stuttgart*),
Yunjie He (*Bosch Center of AI & Univ. of Stuttgart*), Evgeny Kharlamov (*Bosch Center of AI & Univ. of Oslo*),
Steffen Staab (*Univ. of Stuttgart & Univ. of Southampton*)
- **Online Decentralised Mechanisms for Dynamic Ridesharing** 1602
Nicos Protopapas (*Archimedes/RC Athena*), Vahid Yazdanpanah (*University of Southampton*),
Enrico H. Gerding (*University of Southampton*), Sebastian Stein (*University of Southampton*)
- **Interactively Learning the User’s Utility for Best-Arm Identification in Multi-Objective
Multi-Armed Bandits** 1611
Mathieu Reymond (*Vrije Universiteit Brussel*), Eugenio Bargiacchi (*Vrije Universiteit Brussel*),
Diederik M. Roijers (*Vrije Universiteit Brussel*), Ann Nowé (*Vrije Universiteit Brussel*)
- **Design Patterns for Explainable Agents (XAg)** 1621
Sebastian Rodriguez (*RMIT University*), John Thangarajah (*RMIT University*), Andrew Davey (*RMIT University*)
- **Multi-Agent Diagnostics for Robustness via Illuminated Diversity** 1630
Mikayel Samvelyan (*UCL & Meta AI*), Davide Paglieri (*UCL*), Minqi Jiang (*UCL & Meta AI*),
Jack Parker-Holder (*UCL*), Tim Rocktäschel (*UCL*)
- **The Triangles of Dishonesty: Modelling the Evolution of Lies, Bullshit, and Deception
in Agent Societies** 1645
Stefan Sarkadi (*King’s College London*), Peter R. Lewis (*Ontario Tech University*)
- **Computing Optimal Commitments to Strategies and Outcome-Conditional Utility
Transfers** 1654
Nathaniel Sauerberg (*University of Texas - Austin*), Caspar Oesterheld (*Carnegie Mellon University*)
- **CORE: Towards Scalable and Efficient Causal Discovery with Reinforcement Learning** 1664
Andreas Sauter (*Vrije Universiteit Amsterdam*), Nicolò Botteghi (*University of Twente*),
Erman Acar (*IvI and ILLC, University of Amsterdam*), Aske Plaat (*LIACS, Universiteit Leiden*)
- **IDIL: Imitation Learning of Intent-Driven Expert Behavior** 1673
Sangwon Seo (*Rice University*), Vaibhav Unhelkar (*Rice University*)
- **Multi-user Norm Consensus** 1683
Marc Serramia (*King’s College London & City, University of London*),
Natalia Criado (*Universitat Politècnica de València*), Michael Luck (*University of Sussex*)
- **Value Alignment in Participatory Budgeting** 1692
Marc Serramia (*City, University of London*), Maite Lopez-Sanchez (*University of Barcelona*),
Juan A. Rodriguez-Aguilar (*Artificial Intelligence Research Institute (IIA-CSIC)*),
Stefano Moretti (*LAMSADE, Université Paris-Dauphine*)

- **Efficient Public Health Intervention Planning Using Decomposition-Based Decision-focused Learning**..... 1701
Sanket Shah (*Harvard University*), Arun Suggala (*Google Research India*), Milind Tambe (*Google Research*),
Aparna Taneja (*Google Research India*)
- **Battlefield Transfers in Coalitional Blotto Games**..... 1710
Vade Shah (*University of California, Santa Barbara*), Jason R. Marden (*University of California, Santa Barbara*)
- **Modeling Cognitive Biases in Decision-theoretic Planning for Active Cyber Deception**..... 1718
Aditya Shinde (*The University of Georgia*), Prashant Doshi (*The University of Georgia*)
- **Relaxed Exploration Constrained Reinforcement Learning** 1727
Shahaf S. Shperberg (*Ben-Gurion University*), Bo Liu (*The University of Texas at Austin*),
Peter Stone (*The University of Texas at Austin & Sony AI*)
- **LgTS: Dynamic Task Sampling using LLM-generated Sub-Goals for Reinforcement Learning Agents** 1736
Yash Shukla (*Tufts University*), Wenchang Gao (*Tufts University*), Vasanth Sarathy (*Tufts University*),
Alvaro Velasquez (*University of Colorado Boulder*), Robert Wright (*Georgia Tech Research Institute*),
Jivko Sinapov (*Tufts University*)
- **PAS: Probably Approximate Safety Verification of Reinforcement Learning Policy Using Scenario Optimization** 1745
Arambam James Singh (*Nanyang Technological University*),
Arvind Easwaran (*Nanyang Technological University*)
- **Frugal Actor-Critic: Sample Efficient Off-Policy Deep Reinforcement Learning Using Unique Experiences**..... 1754
Nikhil Kumar Singh (*Indian Institute of Technology Kanpur*),
Indranil Saha (*Indian Institute of Technology Kanpur*)
- **On Dealing with False Beliefs and Maintaining KD45_n Property** 1763
Tran Cao Son (*New Mexico State University*), Loc Pham (*New Mexico State University*),
Enrico Pontelli (*New Mexico State University*)
- **Boosting Studies of Multi-Agent Reinforcement Learning on Google Research Football Environment: The Past, Present, and Future**..... 1772
Yan Song (*Institution of Automation, Chinese Academy of Science*), He Jiang (*Digital Brain Lab*),
Haifeng Zhang (*Institution of Automation, CAS, School of Artificial Intelligence, UCAS, & Nanjing Artificial
Intelligence Research of IA*),
Zheng Tian (*ShanghaiTech University*), Weinan Zhang (*Shanghai Jiao Tong University*),
Jun Wang (*University College London*)
- **Algorithmic Filtering, Out-Group Stereotype, and Polarization on Social Media** 1782
Jean Springsteen (*Washington University in St. Louis*), William Yeoh (*Washington University in St. Louis*),
Dino Christenson (*Washington University in St. Louis*)
- **Multi-Agent Alternate Q-Learning**..... 1791
Kefan Su (*Peking University*), Siyuan Zhou (*HKUST*), Jiechuan Jiang (*Peking University*),
Chuang Gan (*MIT-IBM Watson AI Lab*), Xiangjun Wang (*inspir.ai*), Zongqing Lu (*Peking University*)
- **Allocating Contiguous Blocks of Indivisible Chores Fairly: Revisited**..... 1800
Ankang Sun (*Hong Kong Polytechnic University*), Bo Li (*Hong Kong Polytechnic University*)
- **On the Transit Obfuscation Problem**..... 1809
Hideaki Takahashi (*The University of Tokyo*), Alex Fukunaga (*The University of Tokyo*)
- **Towards Efficient Auction Design with ROI Constraints** 1818
Xinyu Tang (*Shandong University*), Hongtao Lv (*Shandong University*), Yingjie Gao (*Shandong University*),
Fan Wu (*Shanghai Jiao Tong University*),
Lei Liu (*Shandong University & Shandong Research Institute of Industrial Technology*),
Lizhen Cui (*Shandong University*)
- **Assessing Fairness of Residential Dynamic Pricing for Electricity using Active Learning with Agent-based Simulation** 1827
Swapna Thorve (*University of Virginia*), Henning Mortveit (*University of Virginia*),
Anil Vullikanti (*University of Virginia*), Madhav Marathe (*University of Virginia*),
Samarth Swarup (*University of Virginia*)

- **Norm Enforcement with a Soft Touch: Faster Emergence, Happier Agents**..... 1837
Sz-Ting Tzeng (*North Carolina State University*), Nirav Ajmeri (*University of Bristol*),
Munindar P. Singh (*North Carolina State University*)
- **Reducing Optimism Bias in Incomplete Cooperative Games** 1847
Filip Úradník (*Charles University*), David Sychrovský (*Charles University*),
Jakub Černý (*Columbia University*), Martin Černý (*Charles University*)
- **Enabling BDI Agents to Reason on a Dynamic Action Repertoire in Hypermedia Environments** 1856
Danai Vachtsevanou (*University of St. Gallen*), Bruno de Lima (*Federal University of Santa Catarina*),
Andrei Ciortea (*University of St. Gallen*), Jomi Fred Hübner (*Federal University of Santa Catarina*),
Simon Mayer (*University of St. Gallen*), Jérémy Lemée (*University of St. Gallen*)
- **MABL: Bi-Level Latent-Variable World Model for Sample-Efficient Multi-Agent Reinforcement Learning**..... 1865
Aravind Venugopal (*Carnegie Mellon University*), Stephanie Milani (*Carnegie Mellon University*),
Fei Fang (*Carnegie Mellon University*), Balaraman Ravindran (*Indian Institute of Technology, Madras*)
- **Optimal Flash Loan Fee Function with Respect to Leverage Strategies** 1874
Chenmin Wang (*The University of Aizu*), Peng Li (*The University of Aizu*), Yulong Zeng (*YeeZTech*),
Xuepeng Fan (*YeeZTech*)
- **Positive Intra-Group Externalities in Facility Location** 1883
Ying Wang (*City University of Hong Kong*), Houyu Zhou (*City University of Hong Kong*),
Minming Li (*City University of Hong Kong*)
- **Generalized Response Objectives for Strategy Exploration in Empirical Game-Theoretic Analysis** 1892
Yongzhao Wang (*The Alan Turing Institute*), Michael P. Wellman (*University of Michigan*)
- **The Reasons that Agents Act: Intention and Instrumental Goals**..... 1901
Francis Rhys Ward (*Imperial College London*), Matt MacDermott (*Imperial College London*),
Francesco Belardinelli (*Imperial College London*), Francesca Toni (*Imperial College London*),
Tom Everitt (*Google DeepMind*)
- **Distributed Online Rollout for Multivehicle Routing in Unmapped Environments** 1910
Jamison W. Weber (*Arizona State University*), Dhanush R. Giriyan (*Arizona State University*),
Devendra R. Parkar (*Arizona State University*), Dimitri P. Bertsekas (*Arizona State University*),
Andréa W. Richa (*Arizona State University*)
- **Towards Generalizability of Multi-Agent Reinforcement Learning in Graphs with Recurrent Message Passing** 1919
Jannis Weil (*Technical University of Darmstadt*), Zhenghua Bao (*Technical University of Darmstadt*),
Osama Abboud (*Huawei Technologies*), Tobias Meuser (*Technical University of Darmstadt*)
- **Multi-Robot Motion and Task Planning in Automotive Production Using Controller-based Safe Reinforcement Learning** 1928
Eric Wete (*Leibniz University Hannover*), Joel Greenyer (*FHDW Hannover*),
Daniel Kudenko (*Leibniz University Hannover*), Wolfgang Nejdl (*Leibniz University Hannover*)
- **New Algorithms for Distributed Fair k -Center Clustering: Almost Accurate as Sequential Algorithms**..... 1938
Xiaoliang Wu (*School of Computer Science and Engineering, Central South University & Xiangjiang Laboratory*),
Qilong Feng (*School of Computer Science and Engineering, Central South University & Xiangjiang Laboratory*),
Ziyun Huang (*Department of Computer Science and Software Engineering, Penn State Erie, The Behrend College*),
Jinhui Xu (*Department of Computer Science and Engineering, State University of New York at Buffalo*),
Jianxin Wang (*Hunan Provincial Key Lab on Bioinformatics, Central South University & Xiangjiang Laboratory*)
- **Adaptive Evolutionary Reinforcement Learning Algorithm with Early Termination Strategy**..... 1947
Xiaoqiang Wu (*Shenzhen University*), Qingling Zhu (*Shenzhen University*), Qiuzhen Lin (*Shenzhen University*),
Weineng Chen (*South China University of Technology*), Jianqiang Li (*Shenzhen University*)

- **Collaborative Deep Reinforcement Learning for Solving Multi-Objective Vehicle Routing Problems**..... 1956
Yaixin Wu (*Eindhoven University of Technology*), Mingfeng Fan (*National University of Singapore*), Zhiguang Cao (*Singapore Management University*), Ruobin Gao (*Nanyang Technological University*), Yaqing Hou (*Dalian University of Technology*), Guillaume Sartoretti (*National University of Singapore*)
- **Safeguard Privacy for Minimal Data Collection with Trustworthy Autonomous Agents**..... 1966
Mengwei Xu (*Newcastle University*), Louise A. Dennis (*The University of Manchester*), Mustafa A. Mustafa (*The University of Manchester & COSIC, KU Leuven*)
- **Learning to Schedule Online Tasks with Bandit Feedback** 1975
Yongxin Xu (*ShanghaiTech University*), Shangshang Wang (*ShanghaiTech University*), Hengquan Guo (*ShanghaiTech University*), Xin Liu (*ShanghaiTech University*), Ziyu Shao (*ShanghaiTech University*)
- **Successively Pruned Q-Learning: Using Self Q-function to Reduce the Overestimation** 1984
Zhaolin Xue (*Fudan University*), Lihua Zhang (*Fudan University*), Zhiyan Dong (*Fudan University*)
- **Attention-based Priority Learning for Limited Time Multi-Agent Path Finding** 1993
Yibin Yang (*Tsinghua University*), Mingfeng Fan (*Central South University*), Chengyang He (*National University of Singapore*), Jianqiang Wang (*Tsinghua University*), Heye Huang (*Tsinghua University*), Guillaume Sartoretti (*National University of Singapore*)
- **Automatic Curriculum for Unsupervised Reinforcement Learning**..... 2002
Yucheng Yang (*Department of Mathematics and Computer Science, Eindhoven University of Technology*), Tianyi Zhou (*Department of Mathematics and Computer Science, University of Maryland, College Park*), Lei Han (*Tencent AI Lab*), Meng Fang (*Department of Mathematics and Computer Science, University of Liverpool & Eindhoven University of Technology*), Mykola Pechenizkiy (*Department of Mathematics and Computer Science, Eindhoven University of Technology*)
- **Multimodal Pretrained Models for Verifiable Sequential Decision-Making: Planning, Grounding, and Perception**..... 2011
Yunhao Yang (*University of Texas at Austin*), Cyrus Neary (*University of Texas at Austin*), Ufuk Topcu (*University of Texas at Austin*)
- **Whom to Trust? Elective Learning for Distributed Gaussian Process Regression** 2020
Zewen Yang (*Robert Koch Institute*), Xiaobing Dai (*Technical University of Munich*), Akshat Dubey (*Robert Koch Institute*), Sandra Hirche (*Technical University of Munich*), Georges Hattab (*Robert Koch Institute & Freie Universität Berlin*)
- **Risk-Aware Constrained Reinforcement Learning with Non-Stationary Policies** 2029
Zhaoxing Yang (*Shanghai Jiao Tong University*), Haiming Jin (*Shanghai Jiao Tong University*), Yao Tang (*Shanghai Jiao Tong University*), Guiyun Fan (*Shanghai Jiao Tong University*)
- **When is Mean-Field Reinforcement Learning Tractable and Relevant?** 2038
Batuhan Yardim (*ETH Zürich*), Artur Goldman (*HSE University*), Niao He (*ETH Zürich*)
- **Viral Marketing in Social Networks with Competing Products** 2047
Ahad N. Zehmakan (*Australian National University*), Xiaotian Zhou (*Fudan University*), Zhongzhi Zhang (*Fudan University*)
- **Majority-based Preference Diffusion on Social Networks** 2057
Ahad N. Zehmakan (*Australian National University*)
- **Human Goal Recognition as Bayesian Inference: Investigating the Impact of Actions, Timing, and Goal Solvability** 2066
Chenyuan Zhang (*The University of Melbourne*), Charles Kemp (*The University of Melbourne*), Nir Lipovetzky (*The University of Melbourne*)
- **Memory-Based Resilient Control Against Non-cooperation in Multi-agent Flocking** 2075
Mingyue Zhang (*Southwest University*), Nianyu Li (*ZGC Lab*), Jialong Li (*Waseda University*), Jiachun Liao (*Nanhu Lab*), Jiamou Liu (*University of Auckland*)
- **MESA: Cooperative Meta-Exploration in Multi-Agent Learning through Exploiting State-Action Space Structure** 2085
Zhicheng Zhang (*Carnegie Mellon University*), Yancheng Liang (*University of Washington*), Yi Wu (*Tsinghua University*), Fei Fang (*Carnegie Mellon University*)

- **Pragmatic Instruction Following and Goal Assistance via Cooperative Language-Guided Inverse Planning** 2094
Tan Zhi-Xuan (*Massachusetts Institute of Technology*), Lance Ying (*Harvard University*), Vikash Mansinghka (*Massachusetts Institute of Technology*), Joshua B. Tenenbaum (*Massachusetts Institute of Technology*)
- **Maximising the Influence of Temporary Participants in Opinion Formation** 2104
Zhiqiang Zhuang (*Tianjin University*), Kewen Wang (*Griffith University*), Zhe Wang (*Griffith University*), Junhu Wang (*Griffith University*), Yinong Yang (*Liaoning University*)

Extended Abstract

- **Defining Deception in Decision Making** 2111
Marwa Abdulhai (*UC Berkeley*), Micah Carroll (*UC Berkeley*), Justin Svegliato (*UC Berkeley*), Anca Dragan (*UC Berkeley*), Sergey Levine (*UC Berkeley*)
- **Actual Trust in Multiagent Systems** 2114
Michael Akintunde (*King's College London*), Vahid Yazdanpanah (*University of Southampton*), Asieh Salehi Fathabadi (*University of Southampton*), Corina Cirstea (*University of Southampton*), Mehdi Dastani (*Utrecht University*), Luc Moreau (*King's College London*)
- **On General Epistemic Abstract Argumentation Frameworks** 2117
Gianvincenzo Alfano (*University of Calabria*), Sergio Greco (*University of Calabria*), Francesco Parisi (*University of Calabria*), Irina Trubitsyna (*University of Calabria*)
- **Approximately Fair Allocation of Indivisible Items with Random Valuations** 2120
Alessandro Aloisio (*Università degli Studi Internazionali di Roma*), Vittorio Bilò (*Università del Salento*), Antonio Mario Caruso (*Università del Salento*), Michele Flammini (*Gran Sasso Science Institute & University of Calabria*), Cosimo Vinci (*Università del Salento*)
- **Quantum Circuit Design: A Reinforcement Learning Challenge** 2123
Philipp Altmann (*LMU Munich*), Adelina Bärligea (*TU Munich*), Jonas Stein (*LMU Munich*), Michael Kölle (*LMU Munich*), Thomas Gabor (*LMU Munich*), Thomy Phan (*University of Southern California*), Claudia Linnhof-Popien (*LMU Munich*)
- **Charging Electric Vehicles Fairly and Efficiently** 2126
Ramsundar Anandanarayanan (*IIT Bombay*), Swaprava Nath (*IIT Bombay*), Rohit Vaish (*IIT Delhi*)
- **Bounding Consideration Probabilities in Consider-Then-Choose Ranking Models** 2129
Ben Aoki-Sherwood (*Johns Hopkins Applied Physics Lab*), Catherine Bregou (*Carleton College*), David Liben-Nowell (*Carleton College*), Kiran Tomlinson (*Cornell University*), Thomas Zeng (*University of Wisconsin*)
- **Abstracting Assumptions in Structured Argumentation** 2132
Iosif Apostolakis (*Institute of Software Technology, TU Graz*), Zeynep G. Saribatur (*Institute of Logic and Computation, TU Wien*), Johannes P. Wallner (*Institute of Software Technology, TU Graz*)
- **Liquid Democracy for Low-Cost Ensemble Pruning** 2135
Ben Armstrong (*University of Waterloo*), Kate Larson (*University of Waterloo*)
- **MiKe: Task Scheduling for UAV-based Parcel Delivery** 2138
Viviana Arrigoni (*Department of Computer Science, Sapienza University of Rome*), Giulio Attenni (*Department of Computer Science, Sapienza University of Rome*), Novella Bartolini (*Department of Computer Science, Sapienza University of Rome*), Matteo Finelli (*Department of Computer Science, Sapienza University of Rome*), Gaia Maselli (*Department of Computer Science, Sapienza University of Rome*)
- **Entropy Seeking Constrained Multiagent Reinforcement Learning** 2141
Ayhan Alp Aydeniz (*Collaborative Robotics and Intelligent Systems Institute, Oregon State University*), Enrico Marchesini (*Laboratory for Information Decision Systems, Massachusetts Institute of Technology*), Christopher Amato (*Khoury College of Computer Sciences, Northeastern University*), Kagan Tumer (*Collaborative Robotics and Intelligent Systems Institute, Oregon State University*)

- **Metric Distortion Under Public-Spirited Voting** 2144
 Amirreza Bagheridelouee (*Sharif University of Technology*),
 Marzie Nilipour (*Sharif University of Technology & Tehran Institute for Advanced Studies (TeIAS)*),
 Masoud Seddighin (*Tehran Institute for Advanced Studies (TeIAS)*),
 Maziar Shamsipour (*Sharif University of Technology*)
- **Concurrency Model of BDI Programming Frameworks: Why Should We Control It?** 2147
 Martina Baiardi (*University of Bologna*), Samuele Burattini (*University of Bologna*),
 Giovanni Ciatto (*University of Bologna*), Danilo Pianini (*University of Bologna*),
 Andrea Omicini (*University of Bologna*), Alessandro Ricci (*University of Bologna*)
- **Adaptive Discounting of Training Time Attacks**..... 2150
 Ridhima Bector (*Nanyang Technological University*), Abhay Aradhya (*Nanyang Technological University*),
 Chai Quek (*Nanyang Technological University*), Zinovi Rabinovich (*Nanyang Technological University*)
- **Computing Balanced Solutions for Large International Kidney Exchange Schemes when Cycle Length is Unbounded**..... 2153
 Márton Benedek (*KRTK, Institute of Economics*), Péter Biró (*KRTK, Institute of Economics*),
 Gergely Csáji (*KRTK, Institute of Economics*), Matthew Johnson (*Durham University*),
 Daniël Paulusma (*Durham University*), Xin Ye (*Durham University*)
- **Decentralized Control of Distributed Manipulators: An Information Diffusion Approach** .. 2156
 Nicolas Bessone (*IT University of Copenhagen*), Payam Zahadat (*IT University of Copenhagen*),
 Kasper Stoy (*IT University of Copenhagen*)
- **Gaze Supervision for Mitigating Causal Confusion in Driving Agents** 2159
 Abhijat Biswas (*Carnegie Mellon University*), Badal Arun Pardhi (*Carnegie Mellon University*),
 Caleb Chuck (*University of Texas at Austin*), Jarrett Holtz (*Robert Bosch LLC & University of Texas at Austin*),
 Scott Niekum (*University of Massachusetts Amherst*), Henny Admoni (*Carnegie Mellon University*),
 Alessandro Allievi (*Robert Bosch LLC & University of Texas at Austin*)
- **Fair Allocation of Conflicting Courses under Additive Utilities** 2162
 Arpita Biswas (*Harvard University*), Yiduo Ke (*Northwestern University*),
 Samir Khuller (*Northwestern University*), Quanquan C. Liu (*Yale University*)
- **Factored MDP based Moving Target Defense with Dynamic Threat Modeling** 2165
 Megha Bose (*International Institute of Information Technology*),
 Praveen Paruchuri (*International Institute of Information Technology*),
 Akshat Kumar (*Singapore Management University*)
- **Decentralised Emergence of Robust and Adaptive Linguistic Conventions in Populations of Autonomous Agents Grounded in Continuous Worlds** 2168
 Jérôme Botoko Ekila (*Vrije Universiteit Brussel*), Jens Nevens (*Vrije Universiteit Brussel*),
 Lara Verheyen (*Vrije Universiteit Brussel*), Katrien Beuls (*Université de Namur*),
 Paul Van Eecke (*Vrije Universiteit Brussel*)
- **Who gets the Maximal Extractable Value? A Dynamic Sharing Blockchain Mechanism** 2171
 Pedro Braga (*King's College London*), Georgios Chionas (*University of Liverpool*),
 Piotr Krysta (*Augusta University*), Stefanos Leonardos (*King's College London*),
 Georgios Piliouras (*Singapore University of Technology and Design*), Carmine Ventre (*King's College London*)
- **User-centric Explanation Strategies for Interactive Recommenders**..... 2174
 Berk Buzcu (*Özyeğin University*), Emre Kuru (*Özyeğin University*),
 Reyhan Aydoğan (*Özyeğin University & Delft University of Technology*)
- **Non Stationary Bandits with Periodic Variation**..... 2177
 Titas Chakraborty (*Indian Institute of Technology Bombay*),
 Parth Shettiwar (*Indian Institute of Technology Bombay*)
- **Mechanism Design for Reducing Agent Distances to Prelocated Facilities** 2180
 Hau Chan (*University of Nebraska-Lincoln*), Xinliang Fu (*City University of Hong Kong*),
 Minming Li (*City University of Hong Kong*),
 Chenhao Wang (*Beijing Normal University & BNU-HKBU United International College*)

- **Anytime Multi-Agent Path Finding using Operation Parallelism in Large Neighborhood Search** 2183
 Shao-Hung Chan (*University of Southern California*), Zhe Chen (*Monash University*),
 Dian-Lun Lin (*University of Wisconsin-Madison*), Yue Zhang (*Monash University*),
 Daniel Harabor (*Monash University*), Sven Koenig (*University of Southern California*),
 Tsung-Wei Huang (*University of Wisconsin-Madison*), Thomy Phan (*University of Southern California*)
- **Agent-Based Triangle Counting and Its Applications in Anonymous Graphs** 2186
 Prabhat Kumar Chand (*Indian Statistical Institute*), Apurba Das (*BITS Pilani*),
 Anisur Rahaman Molla (*Indian Statistical Institute*)
- **HLG: Bridging Human Heuristic Knowledge and Deep Reinforcement Learning for Optimal Agent Performance** 2189
 Bin Chen (*University of South Australia*), Zehong Cao (*University of South Australia*)
- **Cutsets and EF1 Fair Division of Graphs**..... 2192
 Jiehua Chen (*TU Wien*), William S. Zwicker (*Union College*)
- **ANOTO: Improving Automated Negotiation via Offline-to-Online Reinforcement Learning** 2195
 Siqi Chen (*School of Information Science and Engineering, Chongqing Jiaotong University*),
 Jianing Zhao (*College of Intelligence and Computing, Tianjin University*),
 Kai Zhao (*College of Intelligence and Computing, Tianjin University*),
 Gerhard Weiss (*Department of Advanced Computing Sciences, Maastricht University*),
 Fengyun Zhang (*College of Intelligence and Computing, Tianjin University*),
 Ran Su (*College of Intelligence and Computing, Tianjin University*),
 Yang Dong (*School of Information Science and Engineering, Chongqing Jiaotong University*),
 Daqian Li (*School of Information Science and Engineering, Chongqing Jiaotong University*),
 Kaiyou Lei (*College of Computer and Information Science, Southwest University*)
- **Mastering Robot Control through Point-based Reinforcement Learning with Pre-training** 2198
 Yihong Chen (*Tsinghua University*), Cong Wang (*Fuxi Robotics in Netease*), Tianpei Yang (*University of Alberta*),
 Meng Wang (*Fuxi Robotics in Netease*), Yingfeng Chen (*Fuxi Robotics in Netease*),
 Jifei Zhou (*Fuxi Robotics in Netease*), Chaoyi Zhao (*Netease Fuxi AI Lab*), Xinfeng Zhang (*Netease Fuxi AI Lab*),
 Zeng Zhao (*Netease Fuxi AI Lab*), Changjie Fan (*Fuxi Robotics in Netease*), Zhipeng Hu (*Fuxi Robotics in Netease*),
 Rong Xiong (*Zhejiang University*), Long Zeng (*Tsinghua University*)
- **Quantifying Agent Interaction in Multi-agent Reinforcement Learning for Cost-efficient Generalization** 2201
 Yuxin Chen (*University of California, Berkeley*), Chen Tang (*The University of Texas at Austin*),
 Ran Tian (*University of California, Berkeley*), Chenran Li (*University of California, Berkeley*),
 Jinning Li (*University of California, Berkeley*), Masayoshi Tomizuka (*University of California, Berkeley*),
 Wei Zhan (*University of California, Berkeley*)
- **Cognizing and Imitating Robotic Skills via a Dual Cognition-Action Architecture** 2204
 Zixuan Chen (*State Key Laboratory for Novel Software Technology, Nanjing University*),
 Ze Ji (*Cardiff University*), Shuyang Liu (*State Key Laboratory for Novel Software Technology, Nanjing University*),
 Jing Huo (*State Key Laboratory for Novel Software Technology, Nanjing University*),
 Yiyu Chen (*State Key Laboratory for Novel Software Technology, Nanjing University*),
 Yang Gao (*State Key Laboratory for Novel Software Technology, Nanjing University*)
- **Modelling the Dynamics of Subjective Identity in Allocation Games** 2207
 Janvi Chhabra (*International Institute of Information Technology, Bangalore*),
 Jayati Deshmukh (*International Institute of Information Technology, Bangalore*),
 Srinath Srinivasa (*International Institute of Information Technology, Bangalore*)
- **Optimal Task Assignment and Path Planning using Conflict-Based Search with Precedence and Temporal Constraints** 2210
 Yu Quan Chong (*Carnegie Mellon University*), Jiaoyang Li (*Carnegie Mellon University*),
 Katia Sycara (*Carnegie Mellon University*)
- **Minimizing Negative Side Effects in Cooperative Multi-Agent Systems using Distributed Coordination** 2213
 Moumita Choudhury (*University of Massachusetts Amherst*), Sandhya Saisubramanian (*Oregon State University*),
 Hao Zhang (*University of Massachusetts Amherst*), Shlomo Zilberstein (*University of Massachusetts Amherst*)

- **A Reinforcement Learning Framework for Studying Group and Individual Fairness**..... 2216
Alexandra Cimpan (Vrije Universiteit Brussel), Catholijn Jonker (Technische Universiteit Delft),
Pieter Libin (Vrije Universiteit Brussel), Ann Nowé (Vrije Universiteit Brussel)
- **Near-Optimal Online Resource Allocation in the Random-Order Model**..... 2219
Saar Cohen (Bar-Ilan University), Noa Agmon (Bar-Ilan University)
- **Inferring Lewisian Common Knowledge using Theory of Mind Reasoning
in a Forward-chaining Rule Engine**..... 2222
Stephen Craneffeld (University of Otago), Sriashalya Srivathsan (Eastern University),
Jeremy Pitt (Imperial College London)
- **Analyzing Crowdfunding of Public Projects Under Dynamic Beliefs** 2225
Sankarshan Damle (IIIT, Hyderabad), Sujit Gujar (IIIT, Hyderabad)
- **No Transaction Fees? No Problem! Achieving Fairness in Transaction Fee
Mechanism Design**..... 2228
Sankarshan Damle (IIIT, Hyderabad), Varul Srivastava (IIIT, Hyderabad), Sujit Gujar (IIIT, Hyderabad)
- **Deep Learning for Population-Dependent Controls in Mean Field Control
Problems with Common Noise** 2231
Gökçe Dayanikli (Univ. of Illinois Urbana-Champaign), Mathieu Laurière (Shanghai New York Univ.),
Jiacheng Zhang (Univ. of California Berkeley)
- **Attila: A Negotiating Agent for the Game of Diplomacy, Based on Purely Symbolic A.I.**..... 2234
Dave de Jonge (IIIA-CSIC), Laura Rodriguez Cima (IIIA-CSIC)
- **Evaluation of Robustness of Off-Road Autonomous Driving Segmentation against
Adversarial Attacks: A Dataset-Centric Study** 2237
Pankaj Deoli (Robotics Research Lab, RPTU), Rohit Kumar (Robotics Research Lab, RPTU),
Axel Vierling (Robotics Research Lab, RPTU), Karsten Berns (Robotics Research Lab, RPTU)
- **A Comparison of the Myerson Value and the Position Value** 2240
Ayşe Mutlu Derya (TOBB University of Economics and Technology)
- **Pruning Neural Networks Using Cooperative Game Theory**..... 2243
Mauricio Diaz-Ortiz Jr. (Radboud University), Benjamin Kempinski (Radboud University),
Daphne Cornelisse (New York University), Yoram Bachrach (Google DeepMind),
Tal Kachman (Radboud University)
- **Verifying Proportionality in Temporal Voting**..... 2246
Edith Elkind (University of Oxford), Svetlana Obraztsova (Carleton University),
Nicholas Teh (University of Oxford)
- **Computational Theory of Mind with Abstractions for Effective Human-Agent
Collaboration** 2249
Emre Erdogan (Utrecht University), Rineke Verbrugge (University of Groningen),
Pinar Yolum (Utrecht University),
- **Attention Graph for Multi-Robot Social Navigation with Deep Reinforcement Learning** 2252
Erwan Escudie (Univ. Groningen, Bernoulli Institute, CITI Lab., INRIA-INSIA Chroma, & Univ Lyon, UCBL, LIRIS),
Laetitia Maignon (Univ Lyon, UCBL, CNRS, INSA Lyon, LIRIS, UMR5205),
Jacques Saraydaryan (CPE Lyon, CITI Lab., INRIA-INSIA Chroma Team)
- **Strategic Cost Selection in Participatory Budgeting** 2255
Piotr Faliszewski (AGH University), Łukasz Janeczko (AGH University), Andrzej Kaczmarczyk (AGH University),
Grzegorz Lisowski (AGH University), Piotr Skowron (University of Warsaw), Stanisław Szufa (AGH University)
- **Deceptive Path Planning via Reinforcement Learning with Graph Neural Networks** 2258
Michael Y. Fatemi (University of Virginia), Wesley A. Suttle (U.S. Army Research Laboratory),
Brian M. Sadler (U.S. Army Research Laboratory)
- **Influence-Focused Asymmetric Island Model**..... 2261
Andrew Festa (Oregon State University), Gaurav Dixit (Oregon State University),
Kagan Tumer (Oregon State University)
- **A Negotiator's Backup Plan: Optimal Concessions with a Reservation Value**..... 2264
Tamara C.P. Florijn (Centrum Wiskunde & Informatica and Utrecht University),
Pinar Yolum (Utrecht University), Tim Baarslag (Centrum Wiskunde & Informatica and Utrecht University)

- **Aleatoric Predicates: Reasoning about Marbles** 2267
Tim French (*The University of Western Australia*)
- **Synthesizing Social Laws with ATL Conditions** 2270
Rustam Galimullin (*University of Bergen*), Louwe B. Kuijjer (*University of Liverpool*)
- **Combinatorial Client-Master Multiagent Deep Reinforcement Learning for Task Offloading in Mobile Edge Computing** 2273
Tesfay Zemuy Gebrekidan (*University of Southampton*), Sebastian Stein (*University of Southampton*), Timothy J. Norman (*University of Southampton*)
- **Behaviour Modelling of Social Animals via Causal Structure Discovery and Graph Neural Networks** 2276
Gaël Gendron (*NAO Institute, The University of Auckland*), Yang Chen (*NAO Institute, The University of Auckland*), Mitchell Rogers (*NAO Institute, The University of Auckland*), Yiping Liu (*NAO Institute, The University of Auckland*), Mihailo Azhar (*NAO Institute, The University of Auckland*), Shahrokh Heidari (*NAO Institute, The University of Auckland*), David Arturo Soriano Valdez (*NAO Institute, The University of Auckland*), Kobe Knowles (*NAO Institute, The University of Auckland*), Padriac O’Leary (*NAO Institute, The University of Auckland*), Simon Eyre (*Wellington Zoo*), Michael Witbrock (*NAO Institute, The University of Auckland*), Gillian Dobbie (*NAO Institute, The University of Auckland*), Jiamou Liu (*NAO Institute, The University of Auckland*), Patrice Delmas (*NAO Institute, The University of Auckland*)
- **Benchmarking MARL on Long Horizon Sequential Multi-Objective Tasks** 2279
Minghong Geng (*Singapore Management University*), Shubham Pateria (*Singapore Management University*), Budhitama Subagdja (*Singapore Management University*), Ah-Hwee Tan (*Singapore Management University*)
- **Risk-Sensitive Multi-Agent Reinforcement Learning in Network Aggregative Markov Games** 2282
Hafez Ghaemi (*School of ECE, University of Tehran*), Hamed Kebriaei (*School of ECE, University of Tehran*), Alireza Ramezani Moghaddam (*School of ECE, University of Tehran*), Majid Nili Ahmadabadi (*School of ECE, University of Tehran*)
- **Facility Location Games with Task Allocation** 2285
Zifan Gong (*City University of Hong Kong*), Minming Li (*City University of Hong Kong*), Houyu Zhou (*City University of Hong Kong*)
- **Indirect Credit Assignment in a Multiagent System** 2288
Everardo Gonzalez (*Oregon State University*), Siddarth Viswanathan (*Cal Poly State University*), Kagan Tumer (*Oregon State University*)
- **Leveraging Approximate Model-based Shielding for Probabilistic Safety Guarantees in Continuous Environments** 2291
Alexander W. Goodall (*Imperial College London*), Francesco Belardinelli (*Imperial College London*)
- **Reinforcement Learning for Question Answering in Programming Domain using Public Community Scoring as a Human Feedback** 2294
Alexey Gorbatovski (*ITMO University*), Sergey Kovalchuk (*Huawei*)
- **Towards Socially-Acceptable Multi-Criteria Resolution of the 4D-Contracts Repair Problem** 2297
Youssef Hamadi (*Tempero*), Gauthier Picard (*ONERA/DTIS, Université de Toulouse*)
- **Taking Agent-Based Social Simulation to the Next Level Using Exascale Computing: Potential Use-Cases, Capacity Requirements and Threats** 2300
Matt Hare (*The James Hutton Institute*), Doug Salt (*The James Hutton Institute*), Ric Colasanti (*University of Glasgow*), Richard Milton (*University College London*), Mike Batty (*University College London*), Alison Heppenstall (*University of Glasgow*), Gary Polhill (*The James Hutton Institute*)
- **Addressing Permutation Challenges in Multi-Agent Reinforcement Learning** 2303
Somnath Hazra (*IIT Kharagpur*), Pallab Dasgupta (*Synopsys*), Soumyajit Dey (*IIT Kharagpur*)
- **Distribution of Chores with Information Asymmetry** 2306
Hadi Hosseini (*Pennsylvania State University*), Joshua Kavner (*Rensselaer Polytechnic Institute*), Tomasz Wąs (*CNRS, LAMSADE, Université Paris Dauphine-PSL*), Lirong Xia (*Rensselaer Polytechnic Institute*)

• Computing Nash Equilibria in Multidimensional Congestion Games	2309
Mohammad T. Irfan (<i>Bowdoin College</i>), Hau Chan (<i>University of Nebraska-Lincoln</i>), Jared Soundy (<i>University of Nebraska-Lincoln</i>)	
• Strategic Routing and Scheduling for Evacuations	2312
Kazi Ashik Islam (<i>Biocomplexity Institute, University of Virginia</i>), Da Qi Chen (<i>Biocomplexity Institute, University of Virginia</i>), Madhav Marathe (<i>Biocomplexity Institute, University of Virginia</i>), Henning Mortveit (<i>Biocomplexity Institute, University of Virginia</i>), Samarth Swarup (<i>Biocomplexity Institute, University of Virginia</i>), Anil Vullikanti (<i>Biocomplexity Institute, University of Virginia</i>)	
• Dual-Policy-Guided Offline Reinforcement Learning with Optimal Stopping	2315
Weibo Jiang (<i>Tsinghua Shenzhen International Graduate School, Tsinghua University</i>), Shaohui Li (<i>Tsinghua Shenzhen International Graduate School, Tsinghua University</i>), Zhi Li (<i>Tsinghua Shenzhen International Graduate School, Tsinghua University</i>), Yuxin Ke (<i>Tsinghua Shenzhen International Graduate School, Tsinghua University</i>), Zhizhuo Jiang (<i>Tsinghua Shenzhen International Graduate School, Tsinghua University</i>), Yaowen Li (<i>Tsinghua Shenzhen International Graduate School, Tsinghua University</i>), Yu Liu (<i>Department of Electronics, Tsinghua University</i>)	
• N^{PP}-Completeness of Control by Adding Players to Change the Penrose–Banzhaf Power Index in Weighted Voting Games	2318
Joanna Kaczmarek (<i>Heinrich-Heine-Universität Düsseldorf</i>), Jörg Rothe (<i>Heinrich-Heine-Universität Düsseldorf</i>)	
• TIMAT: Temporal Information Multi-Agent Transformer	2321
Qitong Kang (<i>Nankai University</i>), Fuyong Wang (<i>Nankai University</i>), Zhongxin Liu (<i>Nankai University</i>), Zengqiang Chen (<i>Nankai University</i>)	
• On the Computational Complexity of Quasi-Variational Inequalities and Multi-Leader-Follower Games	2324
Bruce M. Kapron (<i>University of Victoria</i>), Koosha Samieefar (<i>University of Victoria</i>)	
• Contiguous Allocation of Binary Valued Indivisible Items on a Path	2327
Yasushi Kawase (<i>The University of Tokyo</i>), Bodhayan Roy (<i>Indian Institute of Technology Kharagpur</i>), Mohammad Azharuddin Sanpui (<i>Indian Institute of Technology Kharagpur</i>)	
• Decentralized Safe Control for Multi-Robot Navigation in Dynamic Environments with Limited Sensing	2330
Saad Khan (<i>Indian Institute of Technology, Bombay</i>), Mayank Baranwal (<i>Tata Consultancy Services Research</i>), Srikant Sukumar (<i>Indian Institute of Technology, Bombay</i>)	
• GLIDE-RL: Grounded Language Instruction through DEmonstration in RL	2333
Chaitanya Kharyal (<i>Microsoft</i>), Sai Krishna Gottipati (<i>AI Redefined</i>), Tanmay Sinha (<i>Microsoft Research</i>), Srijita Das (<i>University of Michigan-Dearborn</i>), Matthew E. Taylor (<i>AI Redefined & University of Alberta</i>)	
• Electric Vehicle Routing for Emergency Power Supply with Deep Reinforcement Learning	2336
Daisuke Kikuta (<i>NTT Corporation</i>), Hiroki Ikeuchi (<i>NTT Corporation</i>), Kengo Tajiri (<i>NTT Corporation</i>), Yuta Toyama (<i>NTT DOCOMO</i>), Masaki Nakamura (<i>NTT DOCOMO</i>), Yuusuke Nakano (<i>NTT Corporation</i>)	
• Difference of Convex Functions Programming for Policy Optimization in Reinforcement Learning	2339
Akshat Kumar (<i>Singapore Management University</i>)	
• Deep Hawkes Process for High-Frequency Market Making	2342
Pankaj Kumar (<i>Jheronimus Academy of Data Science</i>)	
• Fair Scheduling of Indivisible Chores	2345
Yatharth Kumar (<i>IIT Delhi</i>), Sarfaraz Equbal (<i>IIT Bombay</i>), Rohit Gurjar (<i>IIT Bombay</i>), Swaprava Nath (<i>IIT Bombay</i>), Rohit Vaish (<i>IIT Delhi</i>)	
• Guided Exploration in Reinforcement Learning via Monte Carlo Critic Optimization	2348
Igor Kuznetsov (<i>Independent Researcher</i>)	
• A SAT-based Approach for Argumentation Dynamics	2351
Jean-Marie Lagniez (<i>CRIL, Université d'Artois - CNRS</i>), Emmanuel Lonca (<i>CRIL, Université d'Artois - CNRS</i>), Jean-Guy Mailly (<i>Université Paris Cité, LIPADE</i>)	

- **Which Games are Unaffected by Absolute Commitments?** 2354
Daji Landis (*Bocconi University*), Nikolaj I. Schwartzbach (*Bocconi University*)
- **ELA: Exploited Level Augmentation for Offline Learning in Zero-Sum Games**..... 2357
Shiqi Lei (*Institute of Automation, Chinese Academy of Sciences*), Kanghoon Lee (*KAIST*),
Linjing Li (*Institute of Automation, Chinese Academy of Sciences*), Jinkyoo Park (*KAIST*),
Jiachan Li (*University of California, Riverside*)
- **From Explicit Communication to Tacit Cooperation: A Novel Paradigm
for Cooperative MARL**..... 2360
Dapeng Li (*Institute of Automation, Chinese Academy of Sciences & School of Artificial Intelligence,
University of Chinese Academy of Sciences*),
Zhiwei Xu (*Institute of Automation, Chinese Academy of Sciences & School of Artificial Intelligence,
University of Chinese Academy of Sciences*),
Bin Zhang (*Institute of Automation, Chinese Academy of Sciences & School of Artificial Intelligence,
University of Chinese Academy of Sciences*),
Guangchong Zhou (*Institute of Automation, Chinese Academy of Sciences & School of Artificial Intelligence,
University of Chinese Academy of Sciences*),
Zeren Zhang (*Institute of Automation, Chinese Academy of Sciences & School of Artificial Intelligence,
University of Chinese Academy of Sciences*),
Guoliang Fan (*Institute of Automation, Chinese Academy of Sciences & School of Artificial Intelligence,
University of Chinese Academy of Sciences*)
- **Efficient Collaboration with Unknown Agents: Ignoring Similar Agents without
Checking Similarity** 2363
Yansong Li (*University of Illinois Chicago*), Shuo Han (*University of Illinois Chicago*)
- **Simple k -crashing Plan with a Good Approximation Ratio** 2366
Ruixi Luo (*Shenzhen Campus of Sun Yat-sen University*), Kai Jin (*Shenzhen Campus of Sun Yat-sen University*),
Zelin Ye (*Shenzhen Campus of Sun Yat-sen University*)
- **Towards Understanding How to Reduce Generalization Gap in Visual Reinforcement
Learning** 2369
Jiafei Lyu (*Tsinghua University*), Le Wan (*Tencent*), Xiu Li (*Tsinghua University*),
Zongqing Lu (*Peking University*)
- **Opinion Diffusion on Society Graphs Based on Approval Ballots** 2372
Jayakrishnan Madathil (*University of Glasgow*), Neeldhara Misra (*Indian Institute of Technology, Gandhinagar*),
Yash More (*Indian Institute of Technology, Gandhinagar*)
- **Time-Constrained Restless Multi-Armed Bandits with Applications to City
Service Scheduling**..... 2375
Yi Mao (*The Ohio State University*), Andrew Perrault (*The Ohio State University*)
- **Multi-level Aggregation with Delays and Stochastic Arrivals** 2378
Mathieu Mari (*LIRMM, University of Montpellier*),
Michał Pawłowski (*University of Warsaw, IDEAS NCBR, & Sapienza University of Rome*),
Runtian Ren (*IDEAS NCBR*), Piotr Sankowski (*University of Warsaw, IDEAS NCBR, & MIM Solutions*)
- **Projection-Optimal Monotonic Value Function Factorization in Multi-Agent
Reinforcement Learning**..... 2381
Yongsheng Mei (*The George Washington University*), Hanhan Zhou (*The George Washington University*),
Tian Lan (*The George Washington University*)
- **Shield Decentralization for Safe Reinforcement Learning in General Partially
Observable Multi-Agent Environments** 2384
Daniel Melcer (*Northeastern University*), Christopher Amato (*Northeastern University*),
Stavros Tripakis (*Northeastern University*)
- **Enhancing Search and Rescue Capabilities in Hazardous Communication-Denied
Environments through Path-Based Sensors with Backtracking**..... 2387
Alexander Mendelsohn (*University of Maryland*), Donald Sofge (*Naval Research Laboratory*),
Michael Otte (*University of Maryland*)
- **Fairness in Repeated House Allocation** 2390
Karl Jochen Micheel (*Heinrich-Heine-Universität Düsseldorf*),
Anaëlle Wilczynski (*MICS, CentraleSupélec, Université Paris-Saclay*)

- **Continual Depth-limited Responses for Computing Counter-strategies in Sequential Games** 2393
David Milec (*AI Center, FEE, CTU in Prague*), Ondřej Kubicek (*AI Center, FEE, CTU in Prague*),
Viliam Lisý (*AI Center, FEE, CTU in Prague*)
- **Simulated Robotic Soft Body Manipulation** 2396
Glareh Mir (*Institute for Artificial Intelligence, University of Bremen*),
Michael Beetz (*Institute for Artificial Intelligence, University of Bremen*)
- **Leveraging Sub-Optimal Data for Human-in-the-Loop Reinforcement Learning**..... 2399
Calarina Muslimani (*University of Alberta*),
Matthew E. Taylor (*University of Alberta & Alberta Machine Intelligence Institute (Amii)*)
- **MA-MIX: Value Function Decomposition for Cooperative Multiagent Reinforcement Learning Based on Multi-Head Attention Mechanism** 2402
Yu Niu (*Inner Mongolia University*), Hengxu Zhao (*Inner Mongolia University*),
Lei Yu (*Inner Mongolia University*)
- **Ontological Modeling and Reasoning for Comparison and Contrastive Narration of Robot Plans** 2405
Alberto Olivares-Alarcos (*Institut de Robòtica i Informàtica Industrial, CSIC-UPC*),
Sergi Foix (*Institut de Robòtica i Informàtica Industrial, CSIC-UPC*),
Júlia Borràs (*Institut de Robòtica i Informàtica Industrial, CSIC-UPC*),
Gerard Canal (*Department of Informatics, King's College London*),
Guillem Alenyà (*Institut de Robòtica i Informàtica Industrial, CSIC-UPC*)
- **Sentimental Agents: Combining Sentiment Analysis and Non-Bayesian Updating for Cooperative Decision-Making** 2408
Daniele Orner (*Brave Venture Labs*), Elizabeth Akinyi Ondula (*University of Southern California*),
Nick Mumbero Mwangi (*Brave Venture Labs*), Richa Goyal (*University of Southern California*)
- **DCT: Dual Channel Training of Action Embeddings for Reinforcement Learning with Large Discrete Action Spaces** 2411
Pranavi Pathakota (*TCS Research*), Hardik Meisheri (*TCS Research*),
Harshad Khadilkar (*TCS Research & IIT Bombay*)
- **Incentive-based MARL Approach for Commons Dilemmas in Property-based Environments** ... 2414
Lukasz Pelcner (*Lancaster University*), Matheus Aparecido do Carmo Alves (*Lancaster University*),
Leandro Soriano Marcolino (*Lancaster University*), Paula Harrison (*UK Centre for Ecology & Hydrology*),
Peter Atkinson (*Lancaster University*)
- **Decision Making in Non-Stationary Environments with Policy-Augmented Search**..... 2417
Ava Pettet (*Vanderbilt University*), Yunuo Zhang (*Vanderbilt University*), Baiting Luo (*Vanderbilt University*),
Kyle Wray (*Stanford University*), Hendrik Baier (*Eindhoven University of Technology*),
Aron Laszka (*Pennsylvania State University*), Abhishek Dubey (*Vanderbilt University*),
Ayan Mukhopadhyay (*Vanderbilt University*)
- **Optimal Majority Rules and Quantitative Condorcet Properties of Setwise Kemeny Voting Schemes** 2420
Xuan Kien Phung (*Université de Montréal*), Sylvie Hamel (*Université de Montréal*)
- **Fully Independent Communication in Multi-Agent Reinforcement Learning** 2423
Rafael Pina (*Loughborough University London*), Varuna De Silva (*Loughborough University London*),
Corentin Artaud (*Loughborough University London*), Xiaolan Liu (*Loughborough University London*)
- **Emergent Dominance Hierarchies in Reinforcement Learning Agents** 2426
Ram Rachum (*Independent Researcher*), Yonatan Nakar (*Tel Aviv University*),
Bill Tomlinson (*University of California, Irvine*),
Nitay Alon (*Max Planck Institute, Bio-Cybernetics & Hebrew University of Jerusalem*),
Reuth Mirsky (*Bar-Ilan University*)
- **GOV-REK: Governed Reward Engineering Kernels for Designing Robust Multi-Agent Reinforcement Learning Systems**..... 2429
Ashish Rana (*Institute for Enterprise Systems, University of Mannheim*),
Michael Oesterle (*Institute for Enterprise Systems, University of Mannheim*),
Jannik Brinkmann (*Institute for Enterprise Systems, University of Mannheim*)
- **Banzhaf Power in Hierarchical Games**..... 2432
John Randolph (*Brown University*), Amy Greenwald (*Brown University*), Denizalp Goktas (*Brown University*)

- **BAR Nash Equilibrium and Application to Blockchain Design**..... 2435
 Maxime Reynouard (*Nomadic Labs & LAMSADE, Université - PSL*),
 Olga Gorelkina (*Mohammed VI Polytechnic University & University of Liverpool*),
 Rida Laraki (*Mohammed VI Polytechnic University & CNRS (Dauphine - PSL)*)
- **Psychophysiological Models of Cognitive States Can Be Operator-Agnostic**..... 2438
 Erin E. Richardson (*University of Colorado Boulder*), Savannah L. Buchner (*University of Colorado Boulder*),
 Jacob R. Kintz (*University of Colorado Boulder*), Torin K. Clark (*University of Colorado Boulder*),
 Allison P. Anderson (*University of Colorado Boulder*)
- **The Selfishness Level of Social Dilemmas** 2441
 Stefan Roesch (*King's College London*), Stefanos Leonardos (*King's College London*),
 Yali Du (*King's College London*)
- **JaxMAREL: Multi-Agent RL Environments and Algorithms in JAX**..... 2444
 Alexander Rutherford (*University of Oxford*), Benjamin Ellis (*University of Oxford*),
 Matteo Gallici (*Universitat Politècnica de Catalunya*), Jonathan Cook (*University of Oxford*),
 Andrei Lupu (*University of Oxford*), Garðar Ingvarsson (*University College London*),
 Timon Willi (*University of Oxford*), Akbir Khan (*University College London*),
 Christian Schroeder de Witt (*University of Oxford*), Alexandra Souly (*University College London*),
 Saptarashmi Bandyopadhyay (*University of Maryland*), Mikayel Samvelyan (*University College London*),
 Minqi Jiang (*University College London*), Robert Lange (*Technical University Berlin*),
 Shimon Whiteson (*University of Oxford*), Bruno Lacerda (*University of Oxford*),
 Nick Hawes (*University of Oxford*), Tim Rocktäschel (*University College London*),
 Chris Lu (*University of Oxford*), Jakob Foerster (*University of Oxford*)
- **Source Detection in Networks using the Stationary Distribution of a Markov Chain**..... 2447
 Yael Sabato (*Ariel University*), Amos Azaria (*Ariel University*), Noam Hazon (*Ariel University*)
- **Social Identities and Responsible Agency**..... 2450
 Karthik Sama (*International Institute of Information Technology, Bangalore*),
 Jayati Deshmukh (*International Institute of Information Technology, Bangalore*),
 Srinath Srinivasa (*International Institute of Information Technology, Bangalore*)
- **Centralized Training with Hybrid Execution in Multi-Agent Reinforcement Learning**..... 2453
 Pedro P. Santos (*Instituto Superior Técnico & INESC-ID*),
 Diogo S. Carvalho (*Instituto Superior Técnico & INESC-ID*), Miguel Vasco (*KTH Royal Institute of Technology*),
 Alberto Sardinha (*Pontifical Catholic University of Rio de Janeiro & INESC-ID*),
 Pedro A. Santos (*Instituto Superior Técnico & INESC-ID*), Ana Paiva (*Instituto Superior Técnico & INESC-ID*)
 Francisco S. Melo (*Instituto Superior Técnico & INESC-ID*)
- **Geospatial Active Search for Preventing Evictions** 2456
 Anindya Sarkar (*Washington University in St. Louis*), Alex DiChristofano (*Washington University in St. Louis*),
 Sanmay Das (*George Mason University*), Patrick J. Fowler (*Washington University in St. Louis*),
 Nathan Jacobs (*Washington University in St. Louis*), Yevgeniy Vorobeychik (*Washington University in St. Louis*)
- **Balanced and Incentivized Learning with Limited Shared Information in Multi-agent Multi-armed Bandit**..... 2459
 Junning Shao (*Tsinghua University & Shanghai Qi Zhi Institute*), Siwei Wang (*Microsoft Research*),
 Zhixuan Fang (*Tsinghua University & Shanghai Qi Zhi Institute*)
- **Cournot Queueing Games with Applications to Mobility Systems** 2462
 Matthew Sheldon (*Imperial College London*), Dario Paccagnan (*Imperial College London*),
 Giuliano Casale (*Imperial College London*)
- **OPEX: A Large Language Model-Powered Framework for Embodied Instruction Following** 2465
 Haochen Shi (*Université de Montréal & Mila*), Zhiyuan Sun (*Université de Montréal & Mila*),
 Xingdi Yuan (*Microsoft Research*), Marc-Alexandre Côté (*Microsoft Research*),
 Bang Liu (*Université de Montréal & Mila*)
- **Fairness and Cooperation between Independent Reinforcement Learners through Indirect Reciprocity** 2468
 Jacobus Smit (*University of Amsterdam*), Fernando P. Santos (*University of Amsterdam*)
- **Fairness and Privacy Guarantees in Federated Contextual Bandits** 2471
 Sambhav Solanki (*IITH*), Sujit Gujar (*IITH*), Shweta Jain (*IIT Ropar*)

- **Fairness of Exposure in Online Restless Multi-armed Bandits** 2474
Archit Sood (*Indian Institute of Technology Ropar*), Shweta Jain (*Indian Institute of Technology Ropar*),
Sujit Gujar (*International Institute of Information Technology, Hyderabad*)
- **Unlocking the Potential of Machine Ethics with Explainability** 2477
Timo Speith (*University of Bayreuth*)
- **Hybrid Participatory Budgeting: Divisible, Indivisible, and Beyond** 2480
Gogulapati Sreedurga (*University of Edinburgh*)
- **Decent-BRM: Decentralization through Block Reward Mechanisms** 2483
Varul Srivastava (*IIIT, Hyderabad*), Sujit Gujar (*IIIT, Hyderabad*)
- **Ethical Markov Decision Processes with Moral Worth as Rewards** 2486
Mihail Stojanovski (*Normandie Univ, UNICAEN, ENSICAEN, CNRS, GREYC*),
Nadjet Bourdache (*Normandie Univ, UNICAEN, ENSICAEN, CNRS, GREYC*),
Grégory Bonnet (*Normandie Univ, UNICAEN, ENSICAEN, CNRS, GREYC*),
Abdel-Ilah Mouaddib (*Normandie Univ, UNICAEN, ENSICAEN, CNRS, GREYC*)
- **A Multiagent Path Search Algorithm for Large-Scale Coalition Structure Generation** 2489
Redha Taguelmimt (*Univ Lyon, UCBL, CNRS, INSA Lyon, Centrale Lyon, Univ Lyon 2, LIRIS, UMR5205*),
Samir Aknine (*Univ Lyon, UCBL, CNRS, INSA Lyon, Centrale Lyon, Univ Lyon 2, LIRIS, UMR5205*),
Djamila Boukreda (*Faculty of Exact Sciences, Laboratory of Applied Mathematics, University of Bejaia*),
Narayan Changder (*TCG Centres for Research and Education in Science and Technology*),
Tuomas Sandholm (*Carnegie Mellon University, Strategic Machine, Inc., Strategy Robot, Inc., & Optimized
Markets, Inc.*)
- **Efficient Size-based Hybrid Algorithm for Optimal Coalition Structure Generation** 2492
Redha Taguelmimt (*Univ Lyon, UCBL, CNRS, INSA Lyon, Centrale Lyon, Univ Lyon 2, LIRIS, UMR5205*),
Samir Aknine (*Univ Lyon, UCBL, CNRS, INSA Lyon, Centrale Lyon, Univ Lyon 2, LIRIS, UMR5205*),
Djamila Boukreda (*Faculty of Exact Sciences, Laboratory of Applied Mathematics, University of Bejaia*),
Narayan Changder (*TCG Centres for Research and Education in Science and Technology*),
Tuomas Sandholm (*Carnegie Mellon University, Strategic Machine, Inc., Strategy Robot, Inc., & Optimized
Markets, Inc.*)
- **Pure Nash Equilibria in Weighted Congestion Games with Complementarities
and Beyond** 2495
Kenjiro Takazawa (*Hosei University*)
- **HiMAP: Learning Heuristics-Informed Policies for Large-Scale Multi-Agent Pathfinding ...** 2498
Huijie Tang (*KAIST*), Federico Berto (*KAIST*), Zihan Ma (*KAIST*), Chuanbo Hua (*KAIST*),
Kyuree Ahn (*Omelet*), Jinkyoo Park (*KAIST, Omelet*)
- **Fuzzy Clustered Federated Learning Under Mixed Data Distributions** 2501
Peng Tang (*ShangHai Jiao Tong University*), Lifan Wang (*ShangHai Jiao Tong University*),
Weidong Qiu (*ShangHai Jiao Tong University*), Zheng Huang (*ShangHai Jiao Tong University*),
Qiangmin Wang (*ShangHai Jiao Tong University*)
- **Neurological Based Timing Mechanism for Reinforcement Learning** 2504
Michael J. Tarlton (*Oslo Metropolitan University*), Gustavo B. Mello (*Oslo Metropolitan University*),
Anis Yazidi (*Oslo Metropolitan University*)
- **Unifying Regret and State-Action Space Coverage for Effective Unsupervised
Environment Design** 2507
Jayden Teoh Jing Xiang (*Singapore Management University*), Wenjun Li (*Singapore Management University*),
Pradeep Varakantham (*Singapore Management University*)
- **Persuasion by Shaping Beliefs about Multidimensional Features of a Thing** 2510
Kazunori Terada (*Gifu University*), Yasuo Noma (*Gifu University*),
Masanori Hattori (*Chubu Electric Power Co., Inc.*)
- **Game Transformations That Preserve Nash Equilibria or Best-Response Sets** 2513
Emanuel Tewolde (*Foundations of Cooperative AI Lab (FOCAL), Computer Science Department,
Carnegie Mellon University*),
Vincent Conitzer (*Foundations of Cooperative AI Lab (FOCAL), Computer Science Department,
Carnegie Mellon University*)

- **Consensus of Nonlinear Multi-Agent Systems with Semi-Markov Switching Under DoS Attacks** 2516
 Sheng Tian (*Faculty of Applied Sciences, Macao Polytechnic University*),
 Hong Shen (*School of Engineering and Technology, Central Queensland University & Faculty of Applied Sci., Macao Polytechnic University*),
 Yuan Tian (*College of Intelligent Technology and Engineering, Chongqing University of Science and Technology*),
 Hui Tian (*School of Information and Communication Technology, Griffith University*)
- **Reducing Systemic Risk in Financial Networks through Donations** 2519
 Jinyun Tong (*King's College London*), Bart De Keijzer (*King's College London*),
 Carmine Ventre (*King's College London*)
- **Joint Intrinsic Motivation for Coordinated Exploration in Multi-Agent Deep Reinforcement Learning** 2522
 Maxime Toquebiau (*ECE Paris & Sorbonne Université, CNRS, ISIR*),
 Nicolas Bredeche (*Sorbonne Université, CNRS, ISIR*), Faïz Benamar (*Sorbonne Université, CNRS, ISIR*),
 Jae-Yun Jun (*ECE Paris*)
- **Embracing Relational Reasoning in Multi-Agent Actor-Critic** 2525
 Sharlin Utke (*University of Warwick*), Jeremie Houssineau (*Nanyang Technological University*),
 Giovanni Montana (*University of Warwick*)
- **Bayesian Ensembles for Exploration in Deep Q-Learning** 2528
 Pascal R. van der Vaart (*Delft University of Technology*), Neil Yorke-Smith (*Delft University of Technology*),
 Matthijs T. J. Spaan (*Delft University of Technology*)
- **Understanding the Impact of Promotions on Consumer Behavior** 2531
 Jarod Vanderlynden (*Univ. Lille, CNRS, Centrale Lille, UMR & fifty-five*),
 Philippe Mathieu (*Univ. Lille, CNRS, Centrale Lille, UMR*), Romain Warlop (*fifty-five*)
- **On the existence of EFX under picky or non-differentiative agents** 2534
 Maya Viswanathan (*University of Illinois Laboratory High School*),
 Ruta Mehta (*University of Illinois, Urbana-Champaign*),
- **Explaining Sequences of Actions in Multi-agent Deep Reinforcement Learning Models** 2537
 Khaing Phyo Wai (*Singapore Management University*), Minghong Geng (*Singapore Management University*),
 Shubham Pateria (*Singapore Management University*), Budhitama Subagdja (*Singapore Management University*),
 Ah-Hwee Tan (*Singapore Management University*)
- **Clique Analysis and Bypassing in Continuous-Time Conflict-Based Search** 2540
 Thayne T. Walker (*University of Denver & Lockheed Martin Corporation*),
 Nathan R. Sturtevant (*Department of Computing Science, Alberta Machine Intelligence Institute (Amii), University of Alberta*),
 Ariel Felner (*Ben-Gurion University*)
- **Detecting Anomalous Agent Decision Sequences Based on Offline Imitation Learning** 2543
 Chen Wang (*The University of Melbourne*), Sarah Erfani (*The University of Melbourne*),
 Tansu Alpcan (*The University of Melbourne*), Christopher Leckie (*The University of Melbourne*)
- **On the Utility of External Agent Intention Predictor for Human-AI Coordination** 2546
 Chenxu Wang (*Tsinghua University*), Zilong Chen (*Tsinghua University*), Huaping Liu (*Tsinghua University*)
- **Decision Market Based Learning for Multi-agent Contextual Bandit Problems** 2549
 Wenlong Wang (*Massey University*), Thomas Pfeiffer (*Massey University*)
- **Reinforcement Nash Equilibrium Solver** 2552
 Xinrun Wang (*Nanyang Technological University*), Chang Yang (*The Hong Kong Polytechnic University*),
 Shuxin Li (*Nanyang Technological University*), Pengdeng Li (*Nanyang Technological University*),
 Xiao Huang (*The Hong Kong Polytechnic University*), Hau Chan (*University of Nebraska-Lincoln*),
 Bo An (*Nanyang Technological University*)
- **Potential Games on Cubic Splines for Multi-Agent Motion Planning of Autonomous Agents** 2555
 Sam Williams (*University of Southern California*), Jyotirmoy Deshmukh (*University of Southern California*)
- **Competitive Analysis of Online Facility Open Problem** 2558
 Bingham Wu (*The University of Sydney*), Wei Bao (*The University of Sydney*),
 Bing Zhou (*The University of Sydney*)

- **Population-aware Online Mirror Descent for Mean-Field Games by Deep Reinforcement Learning**..... 2561
Zida Wu (*University of California, Los Angeles*), Mathieu Lauriere (*New York University Shanghai*), Samuel Jia Cong Chua (*University of California, Los Angeles*), Matthieu Geist (*Cohere*), Olivier Pietquin (*Cohere*), Ankur Mehta (*University of California, Los Angeles*)
- **Truthful and Stable One-sided Matching on Networks** 2564
Tianyi Yang (*ShanghaiTech University*), Yuxiang Zhai (*ShanghaiTech University*), Dengji Zhao (*ShanghaiTech University*), Xinwei Song (*ShanghaiTech University*), Miao Li (*ShanghaiTech University*)
- **On the Complexity of Candidates-Embedded Multiwinner Voting under the Hausdorff Function**..... 2567
Yongjie Yang (*Chair of Economic Theory, Saarland University*)
- **Dual Role AoI-based Incentive Mechanism for HD map Crowdsourcing**..... 2570
Wentao Ye (*Chinese University of Hong Kong, Shenzhen & Shenzhen Institute of Artificial Intelligence and Robotics for Society*), Bo Liu (*Shenzhen Institute of Artificial Intelligence and Robotics for Society*), Yuan Luo (*Chinese University of Hong Kong, Shenzhen & Shenzhen Institute of Artificial Intelligence and Robotics for Society*), Jianwei Huang (*Chinese University of Hong Kong, Shenzhen & Shenzhen Institute of Artificial Intelligence and Robotics for Society*)
- **Toward Socially Friendly Autonomous Driving Using Multi-agent Deep Reinforcement Learning**..... 2573
Jih-Ching Yeh (*National Tsing Hua University*), Von-Wun Soo (*Chang Gung University*)
- **Solving Offline 3D Bin Packing Problem with Large-sized Bin via Two-stage Deep Reinforcement Learning**..... 2576
Hao Yin (*Southwest Jiaotong University*), Fan Chen (*Southwest Jiaotong University*), Hongjie He (*Southwest Jiaotong University*),
- **Overview of t-DGR: A Trajectory-Based Deep Generative Replay Method for Continual Learning in Decision Making** 2579
William Yue (*The University of Texas at Austin*), Bo Liu (*The University of Texas at Austin*), Peter Stone (*The University of Texas at Austin*)
- **MATLight: Traffic Signal Coordinated Control Algorithm based on Heterogeneous-Agent Mirror Learning with Transformer** 2582
Haipeng Zhang (*Guangxi University of Science and Technology*), Zhiwen Wang (*Guangxi University of Science and Technology*), Na Li (*Guangxi University of Science and Technology*)
- **PADDLE: Logic Program Guided Policy Reuse in Deep Reinforcement Learning** 2585
Hao Zhang (*College of Intelligence and Computing, Tianjin University*), Tianpei Yang (*University of Alberta & Alberta Machine Intelligence Institute*), Yan Zheng (*College of Intelligence and Computing, Tianjin University*), Jianye Hao (*College of Intelligence and Computing, Tianjin University*), Matthew E. Taylor (*University of Alberta & Alberta Machine Intelligence Institute*)
- **Bellman Momentum on Deep Reinforcement Learning**..... 2588
Huihui Zhang (*Dongsheng Intelligent Technology Co., Ltd.*)
- **Auto-Encoding Adversarial Imitation Learning**..... 2591
Kaifeng Zhang (*Shanghai Qi Zhi Institute*), Rui Zhao (*Tencent AI Lab*), Ziming Zhang (*Worcester Polytechnic Institute*), Yang Gao (*Tsinghua University, Shanghai Qi Zhi Institute, & Shanghai Artificial Intelligence Laboratory*)
- **Large Language Model Assisted Multi-Agent Dialogue for Ontology Alignment** 2594
Shiyao Zhang (*Xi'an Jiaotong-Liverpool University*), Yuji Dong (*Xi'an Jiaotong-Liverpool University*), Yichuan Zhang (*Xi'an Jiaotong-Liverpool University*), Terry R. Payne (*University of Liverpool*), Jie Zhang (*Xi'an Jiaotong-Liverpool University*)

- **Mutual Information as Intrinsic Reward of Reinforcement Learning Agents for On-demand Ride Pooling**..... 2597
Xianjie Zhang (*Dalian University of Technology*), Jiahao Sun (*Dalian University of Technology*),
Chen Gong (*University of Virginia*), Kai Wang (*Nanyang Technological University*),
Yifei Cao (*Dalian University of Technology*), Hao Chen (*Institute of Automation, Chinese Academy of Science*),
Yu Liu (*Dalian University of Technology*)
- **Optimal Diffusion Auctions**..... 2600
Yao Zhang (*ShanghaiTech University*), Shanshan Zheng (*ShanghaiTech University*),
Dengji Zhao (*ShanghaiTech University*)
- **Decentralized Competing Bandits in Many-to-One Matching Markets**..... 2603
Yirui Zhang (*Tsinghua University & Shanghai Qi Zhi Institute*),
Zhixuan Fang (*Tsinghua University & Shanghai Qi Zhi Institute*)
- **Distance-Aware Attentive Framework for Multi-Agent Collaborative Perception in Presence of Pose Error**..... 2606
Binyu Zhao (*Harbin Institute of Technology*), Wei Zhang (*Harbin Institute of Technology*),
Zhaonian Zou (*Harbin Institute of Technology*)
- **ENOTO: Improving Offline-to-Online Reinforcement Learning with Q-Ensembles**..... 2609
Kai Zhao (*College of Intelligence and Computing, Tianjin University*),
Jianye Hao (*College of Intelligence and Computing, Tianjin University*),
Yi Ma (*College of Intelligence and Computing, Tianjin University*),
Jinyi Liu (*College of Intelligence and Computing, Tianjin University*),
Yan Zheng (*College of Intelligence and Computing, Tianjin University*),
Zhaopeng Meng (*College of Intelligence and Computing, Tianjin University*)
- **JDRec: Practical Actor-Critic Framework for Online Combinatorial Recommender System** 2612
Xin Zhao (*Tsinghua University*), Jiaxin Li (*Tsinghua University*), Zhiwei Fang (*JD.com*),
Yuchen Guo (*Tsinghua University*), Jinyuan Zhao (*JD.com*), Jie He (*JD.com*), Wenlong Chen (*JD.com*),
Changping Peng (*JD.com*), Guiguang Ding (*Tsinghua University*)
- **Bootstrapped Policy Learning: Goal Shaping for Efficient Task-oriented Dialogue Policy Learning**..... 2615
Yangyang Zhao (*Changsha University of Science and Technology & Utrecht University*),
Mehdi Dastani (*Utrecht University*), Shihan Wang (*Utrecht University*)
- **Towards Zero Shot Learning in Restless Multi-armed Bandits** 2618
Yunfan Zhao (*Harvard University*), Nikhil Behari (*Harvard University*), Edward Hughes (*Google*),
Edwin Zhang (*Harvard University*), Dheeraj Nagaraj (*Google*), Karl Tuyls (*Google*), Aparna Taneja (*Google*),
Milind Tambe (*Harvard University & Google*)
- **vMFER: von Mises-Fisher Experience Resampling Based on Uncertainty of Gradient Directions for Policy Improvement of Actor-Critic Algorithms** 2621
Yiwen Zhu (*Zhejiang University*), Jinyi Liu (*Tianjin University*), Wenya Wei (*Zhejiang University*),
Qianyi Fu (*Zhejiang University*), Yujing Hu (*NetEase Fuxi AI Lab*), Zhou Fang (*Zhejiang University*),
Bo An (*Nanyang Technological University*), Jianye Hao (*Tianjin University*), Tangjie Lv (*NetEase Fuxi AI Lab*),
Changjie Fan (*NetEase Fuxi AI Lab*)

AAAI Track

- **Controlling Delegations in Liquid Democracy**..... 2624
Shiri Alouf-Heffetz (*Ben Gurion University*), Tanmay Inamdar (*Indian Institute of Technology Jodhpur*),
Pallavi Jain (*Indian Institute of Technology Jodhpur*), Nimrod Talmon (*Ben-Gurion University*),
Yash More Hiren (*Indian Institute of Technology Gandhinagar*)
- **Regret-based Defense in Adversarial Reinforcement Learning** 2633
Roman Belaire (*Singapore Management University*), Pradeep Varakantham (*Singapore Management University*),
Thanh Nguyen (*University of Oregon*), David Lo (*Singapore Management University*)
- **Fair and Efficient Division of a Discrete Cake with Switching Utility Loss** 2641
Zheng Chen (*College of Computer Science and Technology, Zhejiang University*),
Bo Li (*Department of Computing, The Hong Kong Polytechnic University*),
Minming Li (*Department of Computer Science, The Hong Kong Polytechnic University*),
Guochuan Zhang (*College of Computer Science and Technology, Zhejiang University*)

- **MAGNets: Micro-Architected Group Neural Networks** 2650
Sumanta Dey (*IIT Kharagpur*), Briti Gangopadhyay (*IIT Kharagpur*), Pallb Dasgupta (*Synopsys Inc.*), Soumyajit Dey (*IIT Kharagpur*)
- **Budget-feasible Egalitarian Allocation of Conflicting Jobs** 2659
Sushmita Gupta (*The Institute of Mathematical Science*), Pallavi Jain (*Indian Institute of Technology Jodhpur*), A Mohanapriya (*The Institute of Mathematical Sciences*), Vikash Tripathi (*The Institute of Mathematical Sciences*)

Blue Sky Ideas Track

- **Multi-deal Negotiation** 2668
Tim Baarslag (*Centrum Wiskunde & Informatica*)
- **Going Beyond Mono-Mission Earth Observation: Using the Multi-Agent Paradigm to Federate Multiple Missions** 2674
Jean-Loup Farges (*ONERA/DTIS, Université de Toulouse*), Filippo Perotto (*ONERA/DTIS, Université de Toulouse*), Gauthier Picard (*ONERA, Université de Toulouse*), Cédric Pralet (*ONERA/DTIS, Université de Toulouse*), Cyrille de Lussy (*Airbus Defence and Space*), Jonathan Guerra (*Airbus Defence and Space*), Philippe Pavero (*Airbus Defence and Space*), Fabrice Planchou (*Airbus Defence and Space*)
- **Empowering BDI Agents with Generalised Decision-Making** 2679
Ramon Fraga Pereira (*University of Manchester*), Felipe Meneguzzi (*University of Aberdeen*)
- **Adaptive Incentive Engineering in Citizen-Centric AI** 2684
Behrad Koohy (*University of Southampton*), Jan Buermann (*University of Southampton*), Vahid Yazdanpanah (*University of Southampton*), Pamela Briggs (*Northumbria University*), Paul Pschierer-Barnfather (*Zaptec*), Enrico Gerding (*University of Southampton*), Sebastian Stein (*University of Southampton*)
- **Designing Artificial Reasoners for Communication** 2690
Emiliano Lorini (*IRIT, CNRS, Toulouse University*)
- **Towards Sustainable Human-Agent Teams: A Framework for Understanding Human-Agent Team Dynamics** 2696
Rui Prada (*INESC-ID & Instituto Superior Técnico, Universidade de Lisboa*), Astrid C. Homan (*University of Amsterdam*), Gerben A. van Kleef (*University of Amsterdam*)
- **Selecting Representative Bodies: An Axiomatic View** 2701
Manon Revel (*Harvard University*), Niclas Boehmer (*Harvard University*), Rachael Colley (*University of Glasgow*), Markus Brill (*University of Warwick*), Piotr Faliszewski (*AGH University*), Edith Elkind (*University of Oxford & ATI*)
- **The Cognitive Hourglass: Agent Abstractions in the Large Models Era** 2706
Alessandro Ricci (*University of Bologna*), Stefano Mariani (*University of Modena and Reggio Emilia*), Franco Zambonelli (*University of Modena and Reggio Emilia*), Samuele Burattini (*University of Bologna*), Cristiano Castelfranchi (*Italian Research Council*)
- **Explainable Agents (XAg) by Design** 2712
Sebastian Rodriguez (*MIT University*), John Thangarajah (*MIT University*)
- **Utility-Based Reinforcement Learning: Unifying Single-objective and Multi-objective Reinforcement Learning** 2717
Peter Vamplew (*Federation University Australia*), Cameron Foale (*Federation University Australia*), Conor F. Hayes (*Lawrence Livermore National Laboratory*), Patrick Mannion (*University of Galway*), Enda Howley (*University of Galway*), Richard Dazeley (*Deakin University*), Scott Johnson (*Deakin University*), Johan Källström (*Linköping University*), Gabriel Ramos (*Universidade do Vale do Rio dos Sinos*), Roxana Rădulescu (*Vrije Universiteit Brussel / Utrecht University*), Willem Röpke (*Vrije Universiteit Belgium*), Diederik M. Roijers (*Vrije Universiteit Brussel*)

Doctoral Consortium

- **Abstraction in Non-Monotonic Reasoning**..... 2722
Iosif Apostolakis (*Graz University of Technology*)
- **Emergence of Linguistic Conventions In Multi-Agent Systems Through Situated Communicative Interactions** 2725
Jérôme Botoko Ekila (*Vrije Universiteit Brussel*)
- **Communication and Generalization in Multi-Agent Learning** 2728
Jiaxun Cui (*The University of Texas at Austin*)
- **The Multi-agent System based on LLM for Online Discussions** 2731
Yihan Dong (*Kyoto University*)
- **Negotiation Strategies for Combining Partial Deals in One-To-Many Negotiations** 2734
Tamara C.P. Florijn (*Centrum Wiskunde & Informatica and Utrecht University*)
- **Scaling up Cooperative Multi-agent Reinforcement Learning Systems**..... 2737
Minghong Geng (*Singapore Management University*)
- **Toward Explainable Agent Behaviour**..... 2740
Victor Gimenez-Abalos (*Barcelona Supercomputing Center & Universitat Politècnica de Catalunya*)
- **Towards building Autonomous AI Agents and Robots for Open World Environments**..... 2743
Shivam Goel (*Tufts University*)
- **Large Learning Agents: Towards Continually Aligned Robots with Scale in RL**..... 2746
Bram Grooten (*Eindhoven University of Technology*)
- **Efficient Continuous Space BeliefMDP Solutions for Navigation and Active Sensing** 2749
Himanshu Gupta (*University of Colorado Boulder*)
- **Building Trustworthy Human-Centric Autonomous Systems Via Explanations**..... 2752
Balint Gyevnar (*University of Edinburgh*)
- **Adaptive Decision-Making in Non-Stationary Markov Decision Processes**..... 2755
Baiting Luo (*Vanderbilt University*)
- **Interactive Control and Decision-Making for Multi-Robots Systems**..... 2758
Yiwei Lyu (*Carnegie Mellon University*)
- **Leveraging Human Models to Personalize AI Interventions for Behavior Change** 2761
Eura Nofshin (*Harvard University*)
- **Predicting and Protecting the Cognitive Health of Operators in Isolated, Confined, and Extreme Environments**..... 2764
Erin E. Richardson (*University of Colorado Boulder*)
- **Generalizing Objective-Specification in Markov Decision Processes**..... 2767
Pedro P. Santos (*INESC-ID, Instituto Superior Técnico*)
- **Decentralized Robust Planning of the Water Supply Network under Uncertainty** 2770
Alireza Shefaei (*Delft University of Technology*)
- **Cooperative Multi-Agent Reinforcement Learning in Convention Reliant Environments ...** 2773
Jarrod Shipton (*University of the Witwatersrand Johannesburg*)
- **Formal and Natural Language assisted Curriculum Generation for Reinforcement Learning Agents** 2776
Yash Shukla (*Tufts University*)
- **Distributive and Temporal Fairness in Algorithmic Collective Decision-Making** 2779
Nicholas Teh (*University of Oxford*)
- **Bayesian Model-Free Deep Reinforcement Learning** 2782
Pascal R. van der Vaart (*Delft University of Technology*)
- **Autonomous Skill Acquisition for Robots Using Graduated Learning**..... 2785
Gautham Vasan (*University of Alberta*)

- **Allocating Resources with Imperfect Information** 2788
Shiji Xing (*The Hong Kong Polytechnic University*)
- **Advancing Sample Efficiency and Explainability in Multi-Agent Reinforcement Learning** . 2791
Zhicheng Zhang (*Carnegie Mellon University*)

Demonstration Track

- **EVtonomy: A Personalised Route Planner for Electric Vehicles** 2794
Alexandry Augustin (*University of Southampton*), Elnaz Shafipour (*University of Southampton*),
Sebastian Stein (*University of Southampton*)
- **End to End Camera only Drone Detection and Tracking Demo within a Multi-agent Framework with a CNN-LSTM Model for Range Estimation** 2797
Maxence de Rochechouart (*Sorbonne University, Abu Dhabi*), Raed Abu Zitar (*Sorbonne University, Abu Dhabi*),
Amal El Fallah Seghrouchni (*Sorbonne University*), Frederic Barbaresco (*Thales Group*)
- **Imitation Learning Datasets: A Toolkit For Creating Datasets, Training Agents and Benchmarking**..... 2800
Nathan Gavenski (*King's College Longon*), Michael Luck (*University of Sussex*),
Odinaldo Rodrigues (*King's College London*)
- **A Symbolic Sequential Equilibria Solver for Game Theory Explorer** 2803
Moritz Graf (*University of Freiburg*), Thorsten Engesser (*IRIT*), Bernhard Nebel (*University of Freiburg*)
- **Naphtha Cracking Center Scheduling Optimization using Multi-Agent Reinforcement Learning** 2806
Sunghoon Hong (*LG AI Research*), Deunsol Yoon (*LG AI Research*), Whiyoung Jung (*LG AI Research*),
Jinsang Lee (*LG AI Research*), Hyundam Yoo (*LG AI Research*), Jiwon Ham (*LG AI Research*),
Suhyun Jung (*LG AI Research*), Chanwoo Moon (*LG AI Research*), Yeontae Jung (*LG AI Research*),
Kanghoon Lee (*LG AI Research*), Woohyung Lim (*LG AI Research*), Somin Jeon (*LG Chem*),
Myounggu Lee (*LG Chem*), Sohui Hong (*LG Chem*), Jaesang Lee (*LG Chem*),
Hangyoul Jang (*LG Chem*), Changhyun Kwak (*LG Chem*), Jeonghyeon Park (*LG Chem*),
Changhoon Kang (*LG Chem*), Jungki Kim (*LG Chem*)
- **Conversational Language Models for Human-in-the-Loop Multi-Robot Coordination** 2809
William Hunt (*University of Southampton*), Toby Godfrey (*University of Southampton*),
Mohammad D. Soorati (*University of Southampton*)
- **STV+KH: Towards Practical Verification of Strategic Ability for Knowledge and Information Flow** 2812
Mateusz Kamiński (*Institute of Computer Science, Polish Academy of Sciences & Faculty of Mathematics and Computer Science, Nicolaus Copernicus University in Toruń*),
Damian Kurpiewski (*Institute of Computer Science, Polish Academy of Sciences & Faculty of Mathematics and Computer Science, Nicolaus Copernicus University in Toruń*),
Wojciech Jamroga (*Interdisciplinary Centre for Security, Reliability and Trust, SnT, University of Luxembourg & Institute of Computer Science, Polish Academy of Sciences*)
- **SMT4SMTL: A Tool for SMT-Based Satisfiability Checking of SMTL** 2815
Artur Niewiadomski (*University of Siedlce*), Maciej Nazarczuk (*University of Siedlce*),
Mateusz Przychodzki (*University of Siedlce*), Magdalena Kacprzak (*Bialystok University of Technology*),
Wojciech Penczek (*Institute of Computer Science, PAS*), Andrzej Zbrzezny (*Jan Dlugosz University in Czestochowa*)
- **Engaging the Elderly in Exercise with Agents: A Gamified Stationary Bike System for Sarcopenia Management** 2818
Yang Qiu (*Nanyang Technological University*), Ping Chen (*Nanyang Technological University*),
HuiGuo Zhang (*Nanyang Technological University*), Bo Huang (*Nanyang Technological University*),
Di Wang (*Nanyang Technological University*), Zhiqi Shen (*Nanyang Technological University*)
- **pgeon applied to Overcooked-AI to explain agents' behaviour** 2821
Adrian Tormos (*Barcelona Supercomputing Center*),
Victor Gimenez-Abalos (*Barcelona Supercomputing Center*),
Javier Vázquez-Salceda (*Universitat Politècnica de Catalunya*),
Sergio Alvarez-Napagao (*Universitat Politècnica de Catalunya& Barcelona Supercomputing Center*)

JAAMAS Track

- **Generating and Choosing Organizations for Multi-Agent Systems** 2824
Cleber J. Amaral (*Instituto Federal de Santa Catarina*), Jomi F. Hübner (*Universidade Federal de Santa Catarina*),
Stephen Crane field (*University of Otago*)
- **A Summary of the RGS[®]: an RDF Graph Synchronization System for Collaborative Robotics** 2827
Cyrille Berger (*Linköping University*), Patrick Doherty (*Linköping University*),
Piotr Rudol (*Linköping University*), Mariusz Wzorek (*Linköping University*)
- **A Summary of Online Markov Decision Processes with Non-oblivious Strategic Adversary** 2830
Le Cong Dinh (*University of Southampton*), David Henry Mguni (*Huawei R&D UK*),
Long Tran-Thanh (*University of Warwick*), Jun Wang (*University College London*),
Yaodong Yang (*Institute for AI, Peking University*)
- **Extended Abstract of Diffusion Auction Design with Transaction Costs** 2833
Bin Li (*Nanjing University of Science and Technology*),
Dong Hao (*University of Electronic Science and Technology of China*), Dengji Zhao (*ShanghaiTech University*)
- **Toward a Normative Approach for Resilient Multiagent Systems: A Summary** 2836
Geeta Mahala (*University of Wollongong*), Ozgur Kafali (*University of Kent*),
Hoa Khanh Dam (*University of Wollongong*), Aditya Ghose (*University of Wollongong*),
Munindar P. Singh (*North Carolina State University*)
- **Combining Theory of Mind and Abductive Reasoning in Agent-Oriented Programming** 2839
Nieves Montes (*Artificial Intelligence Research Institute (III A-CSIC)*), Michael Luck (*University of Sussex*),
Nardine Osman (*Artificial Intelligence Research Institute (III A-CSIC)*), Odinaldo Rodrigues (*King's College London*),
Carles Sierra (*Artificial Intelligence Research Institute (III A-CSIC)*)
- **Extended Abstract: Price of Anarchy of Traffic Assignment with Exponential Cost Functions** ... 2842
Jianglin Qiao (*University of South Australia*), Dave De Jonge (*III A-CSIC*),
Dongmo Zhang (*Western Sydney University*), Simeon Simoff (*Western Sydney University*),
Carles Sierra (*III A-CSIC*), Bo Du (*Griffith University*)
- **A Survey of Multi-Agent Deep Reinforcement Learning with Communication** 2845
Changxi Zhu (*Department of Information and Computing Sciences, Utrecht University*),
Mehdi Dastani (*Department of Information and Computing Sciences, Utrecht University*),
Shihan Wang (*Department of Information and Computing Sciences, Utrecht University*)
- Author Index** 2848

Conference Organisation

General Chairs

Mehdi Dastani (*Utrecht University, Netherlands*)
Jaime Simão Sichman (*University of São Paulo, Brazil*)

Program Chairs

Natasha Alechina (*Utrecht University, Netherlands*)
Virginia Dignum (*Umeå University, Sweden*)

Local Chairs

Yang Chen (*University of Auckland, New Zealand*)
Jiamou Liu (*University of Auckland, New Zealand*)
Tony Savarimuthu (*University of Otago, New Zealand*)
Kaiqi Zhao (*University of Auckland, New Zealand*)

JAAMAS Track Chairs

Amit Chopra (*Lancaster University, UK*)
Viviana Mascardi (*University of Genova, Italy*)

AAAI Track Chairs

Sven Koenig (*University of Southern California, USA*)
Yang Chen (*University of Auckland, New Zealand*)

Blue Sky Ideas Track Chairs

Amal El Fallah Seghrouchni (*Sorbonne University, France*)
Ann Nowé (*Free University of Brussels, Belgium*)

Workshop Chairs

Davide Grossi (*University of Groningen & University of Amsterdam, Netherlands*)
Julian Padget (*University of Bath, UK*)
Samarth Swarup (*University of Virginia, USA*)

Tutorial Chairs

Rino Falcone (*National Research Council of Italy, Italy*)
Paolo Turrini (*University of Warwick, UK*)

Demonstration and Competition Chairs

Gustavo Nardin (*Mines Saint-Étienne, France*)
Vahid Yazdanpanah (*University of Southampton, UK*)

Doctoral Consortium Chairs

Bahar Rastegari (*University of Southampton, UK*)
Serena Villata (*Côte d'Azur University, France*)

Scholarship Chairs

Vincent Corruble (*Sorbonne University, France*)
Natalia Criado (*Technical University of Valencia, Spain*)
Shuyue Hu (*Shanghai AI Lab, China*)
Yevgeniy Vorobeychik (*Washington University in St. Louis, USA*)

Publicity Chairs

Reyhan Aydogan (*Özyeğin University, Turkey & Delft University of Technology, Netherlands*)
Andrei Ciortea (*University of St. Gallen, Switzerland*)

Publication Chairs

Fabian Lorig (*Malmö University, Sweden*)
Yingqian Zhang (*Eindhoven University of Technology, Netherlands*)

Diversity Chairs

Cristina Baroglio (*University of Turin, Italy*)
Pinar Yolum (*Utrecht University, Netherlands*)

Finance Chairs

Stephen Cranefield (*University of Otago, New Zealand*)
Hadi Hosseini (*Pennsylvania State University, USA*)

Area Chairs

Coordination, Organisations, Institutions, Norms and Ethics

Marija Slavkovik (*University of Bergen, Norway*)
Juan Carlos Nieves (*Umeå University, Sweden*)

Engineering Multiagent Systems

Matteo Baldoni (*University of Turin, Italy*)
Amit Chopra (*Lancaster University, UK*)

Humans and AI / Human-Agent Interaction

Rui Prada (*INESC-ID and University of Lisbon, Portugal*)
Kary Främling (*Umeå University, Sweden*)

Innovative Applications

Nardine Osman (*IIIA-CSIC, Spain*)
Vicent Botti (*Valencia Polytechnic University, Spain*)

Knowledge Representation, Reasoning, and Planning

Val Goranko (*Stockholm University, Sweden*)
Wojtek Jamroga (*Polish Academy of Sciences, Poland*)

Learning and Adaptation

Nils Jansen (*Radboud University, Netherlands*)
Paulo Novais (*University of Minho, Portugal*)

Markets, Auctions, and Non-Cooperative Game Theory

Paolo Turrini (*University of Warwick, UK*)
Nicolas Troquard (*Gran Sasso Science Institute, Italy*)

Modelling and Simulation of (Artificial) Societies

Michael Lees (*University of Amsterdam, Netherlands*)
Harko Verhagen (*Stockholm University, Sweden*)

Social Choice and Cooperative Game Theory

Ulle Endriss (*University of Amsterdam, Netherlands*)
Piotr Skowron (*University of Warsaw, Poland*)

(Multi-agent) Reinforcement Learning

Matthijs Spaan (*Delft University of Technology, Netherlands*)
Matt Taylor (*University of Alberta, Canada*)
Shuyue Hu (*Shanghai Artificial Intelligence Laboratory, China*)

Robotics

Luca Iocchi (*Sapienza University of Rome, Italy*)
Joana Campos (*INESC-ID & University of Lisbon, Portugal*)

Senior Programme Committee

Alessandro Abate
Stefano Albrecht
Huib Aldewereld
Christopher Amato
Francesco Amigoni
Chenjia Bai
Hendrik Baier
Peter Biro
Thomas Bolander
Ioana Boureanu
Simina Branzei
Jan Broersen
Davide Calvaresi
Ioannis Caragiannis
Shih-Fen Cheng
Luís Correia
Paul Davidsson
Celso de Melo
Edith Elkind
Piotr Faliszewski
Fei Fang
Helene Fargier
Alessandro Farinelli

Michele Flammini
Rupert Freeman
Katsuhide Fujita
Nicola Gatti
Enrico Gerding
Umberto Grandi
Amy Greenwald
Davide Grossi
Riccardo Guidotti
Paul Harrenstein
Andreas Herzig
Jesse Hoey
Catholijn Jonker
Joost-Pieter Katoen
Bettina Könighofer
Bruno Lacerda
Mathieu Lauriere
Tom Lenaerts
Stefanos Leonardos
Beishui Liao
Pedro U. Lima
Yen-Chen Liu

Alessio Lomuscio
Maite Lopez-Sanchez
Emiliano Lorini
José Machado
Viviana Mascardi
Reshef Meir
Sanjay Modgil
Pradeep Kumar Murukannaiah
Amro Najjar
Xavier Parent
Bei Peng
Guillermo Perez
Dominik Peters
Christopher Peters
David Pynadath
Katharina Rohlfing
Fernando Santos
Bastin Tony Roy Savarimuthu
Sandip Sen
Nisarg Shah
Onn Shehory
Thiago D. Simão

Munindar P. Singh
Gita Sukthankar
Mingfei Sun
Samarth Swarup
Katia Sycara
John Thangarajah
Andreas Theodorou
Taiki Todo
Ufuk Topcu
Kagan Tumer
Koen van Dam
Pradeep Varakantham
Xinrun Wang
Ying Wen
Anaëlle Wilczynski
Michael Winikoff
Elmira Yadollahi
Makoto Yokoo
Zongzhang Zhang
Jie Zhang
Yan Zheng
Yair Zick

Programme Committee

Athirai A. Irissappane	Aur�lie Beynier	Samuel Christie	Edgar Duenez-Guzman
Azizi Ab Aziz	Monowar Bhuyan	Chen Chu	Dalila Dur�es
Waseem Abbasi	Beatrice Biancardi	Giovanni Ciatto	Martin Durand
Benjamin Abramowitz	Reinaldo A. C. Bianchi	Andrei Ciortea	Fran�ois Durand
Matteo Acclavio	Holger Billhardt	Joe Collenette	Ivana Dusparic
Aniruddha Adiga	Vittorio Bilo	Rachael Colley	Marcin Dziubiński
Noa Agmon	Davide Bil�	Rem Collier	Adam Eck
Adrian Agogino	Andreas Birk	Giacomo Como	Thorsten Engesser
Jo�o Paulo Aires	Georgios Birmpas	Vincent Corruble	Matthias Englert
Nirav Ajmeri	Niclas Boehmer	Stefania Costantini	Petter Ericson
Shah Jamal Alam	Guido Boella	Jacob Crandall	Santiago Escobar
Guillem Alenya	Ladislau Boloni	Emilio Cruciani	Babak Esfandiari
Wagdi Alrawagfeh	Elizabeth Bondi-Kelly	Nuno Cruz Garcia	Andrew Estornell
Sergio Alvarez-Napagao	Blai Bonet	Gergely Cs�ji	J�r�me Euzenat
Sofia Amador	Gr�gory Bonnet	Heriberto Cuayahuitl	Jan Faigl
Cleber Amaral	Sirin Botan	Murat Cubuktepe	Brandon Fain
Fred Amblard	Robert Bredereck	Marcin Czupryna	Zhixuan Fang
John Anderson	Stefano Bromuri	C�lia da Costa Pereira	Miguel Faria
Andrea Angiuli	Martin Bullinger	Felipe Ieno Da Silva	Fatma Faruq
Luis Antunes	Juan Carlos Burguillo	Gianlorenzo D'Angelo	Shaheen Fatima
Jaime Arias	Alessandro Burigana	Michael Dann	Zeyu Feng
Reuben Aronson	Damien Busatto-Gaston	Srijita Das	Elias Fern�ndez Domingos
Mehrnoosh Askarpour	Roberta Calegari	Prithviraj Dasgupta	Diodato Ferraioli
Yonatan Aumann	Zehong Cao	Maiquel de Brito	Angelo Ferrando
Raphael Avalos	Rafael Cardoso	Ronald de Haan	Raul Fervari
Guy Avni	Ignacio Carlucho	Dave de Jonge	Tesca Fitzgerald
Reyhan Aydogan	Steven Carr	Bart de Keijzer	Zack Fitzsimmons
Thom Badings	Carlos Carrascosa	Frits de Nijs	Benedetta Flammini
Fengshuo Bai	Arthur Casals	Martina De Sanctis	Henrique Fonseca
James Bailey	Alberto Castellini	Lavindra de Silva	Nicoletta Fornara
Andrea Baisero	Luciano Cavalcante Siebert	Marina De Vos	Ramon Fraga Pereira
Javier Bajo	Katarina Cechlarova	Keith Decker	Thiago Freitas Dos Santos
Jo�o Balsa	Mustafa Mert Celikok	Florent Delgrange	Naoki Fukuta
Saptarashmi Bandyopadhyay	Tommaso Renato Cesari	Dario Della Monica	Rustam Galimullin
Bikramjit Banerjee	Milan Ceska	Davide Dell'Anna	St�phane Galland
Bitu Banihashemi	Debraj Chakraborty	St�phane Demri	Jiarui Gan
Jacques Bara	Mithun Chakraborty	Michael Dennis	Sriram Ganapathi Subramanian
Wolfram Barfuss	Hau Chan	Louise Dennis	Julian Garcia
Cristina Baroglio	Yang Chao	Palash Dey	Swen Gaudl
Johan Barthelemy	Archie Chapman	Sharon Di	Benoit Gaudou
Nicola Basilico	Fred Charles	Carlos Diaz Alvarenga	Anna Gautier
Debabrota Basu	Yang Chen	Mart�n Di�guez	Sujata Ghosh
Kevin Baum	Ziyu Chen	Ludwig Dierks	Hugo Gilbert
Ruben Becker	Weiwei Chen	Catalin Dima	Maria Gini
Khaled Belahcene	Shuo Chen	Christos Dimitrakakis	Paolo Giudici
Francesco Belardinelli	Jie Chen	Dragan Doder	Piotr Gmytrasiewicz
Gaia Belardinelli	Yukun Cheng	Huimin Dong	Judy Goldsmith
Tony Belpaeme	Guangliang Cheng	Sylvie Doutre	Matthew Gombolay
Giovanni Beltrame	Jithin Cheriyan	Alexis Drogoul	Jorge Gomez-Sanz
Jamal Bentahar	Manuela Chessa	Yali Du	Rica Gonen
Matthias Bentert	Manolis Chiou	Heshan Du	Gabriel Gonzalez
Federico Bergenti	Mathieu Chollet	Clemens Dubsclaff	Laurent Gourves

Guido Governatori	Kei Kimura	Yongmei Liu	Neeldhara Misra
Nathan Griffiths	Styliani Kleanthous	Xinghan Liu	Munyque Mittelmann
Roderich Gross	Sophia Knight	Rui Liu	Thomas Moerland
Gustav Grund Pihlgren	Dušan Knop	Kweiguu Liu	Fabio Mogavero
Luciano Gualà	Matt Knudson	Kai-Yuan Liu	Yasser Mohammad
Zahia Guessoum	Bojana Kodric	Yuan Liu	Jose M. Molina
Hao Guo	Nadin Kokciyan	Yu Liuwen	Gianpiero Monaco
Mingyu Guo	Sébastien Konieczny	Robert Loftin	Nieves Montes
Önder Gürcan	Stefan Kopp	Michele Lombardi	Maxime Morge
The Anh Han	Alec Koppel	Luca Longo	Koichi Moriyama
Dongge Han	Martin Koutecky	Andrea Loreggia	Andreas Morris-Martin
Jianye Hao	TomášKrajník	Fabian Lorig	Gildas Morvan
Dong Hao	Piotr Krysta	Gale Lucas	Yazan Mualla
Adrian Haret	Sylvain Kubler	Matt Luckcuck	Ayan Mukhopadhyay
Arnd Hartmanns	Pooja Kulkarni	Yuan Luo	Jean-Pierre Muller
Hisashi Hayashi	Marcin Kurdziel	Jieting Luo	Paul Fernand Muller
Fredrik Heintz	Antti Kuusisto	Matteo Luperto	Jörg P. Müller
Alison Heppenstall	Maria Kyrarini	Xueguang Lyu	Aniket Mushekar
Jesse Heyninck	Morteza Lahijanian	Ramanujan M. Sridharan	Mirco Murolesi
Laura Hiatt	Kiran Lakkaraju	Hang Ma	Lih Naamani-Dery
Koen Hindriks	Jérôme Lang	Patrick MacAlpine	Tatsuo Nakajima
Wolfgang Hoenig	Rida Laraki	Aditya Mahajan	Shivika Narang
Hannes Högni Vilhjálmsson	Aron Laszka	Yasir Mahmood	Luis Gustavo Nardin
Tom Holvoet	Mohamad Latifian	Jean-Guy Mailly	Francesca Naretto
Arjen Hommersom	Tiep Le	Terrence W.K. Mak	Swaprava Nath
Enda Howley	Tuan Le	Nick Malleson	Pavel Naumov
Liang Hu	Patrick Lederer	Vadim Malvone	Alfredo Navarra
Xin Huang	Paulo Leitao	Jan Maly	Grigory Neustroev
Longbo Huang	Joao Leite	Patrick Mannion	Trung Thanh Nguyen
Joris Hulstijn	Pascal Lenzner	Weichao Mao	Doanh Nguyen-Ngoc
Mohammad Irfan	Yves Lespérance	Gilberto Antonio Marcon Dos Santos	Artur Niewiadomski
Atil Iscen	Joshua Letchford	Stefano Mariani	Emma Norling
Takayuki Ito	Zun Li	Alex Marin	Arianna Novaro
Atsushi Iwasaki	Bo Li	Iván Marsa Maestre	Svetlana Obraztsova
Alireza Jafari	Tianyu Li	Jean-Claude Martin	Andrea Omicini
Wander Jager	Jiaoyang Li	Maria Vanina Martinez	Nir Oren
Danyang Jia	Pengdeng Li	Fernando Martínez-Plumed	Colm O’Riordan
Lili Jiang	Shuai Li	Bruno Martins	Andrea Orlandini
Kristiina Jokinen	Tingting Li	Antonio Mastropietro	Sascha Ossowski
Jaume Jordán	Minming Li	Philippe Mathieu	Youssef Oualhadj
Marcin Jurdzinski	Guangliang Li	Laetitia Matignon	Eric Pacuit
Andrzej Kaczmarczyk	Anran Li	Shigeo Matsubara	Julian Padget
Anson Kahng	Siyuan Li	Nicholas Mattei	Monica Palmirani
Timotheus Kampik	Pieter Libin	Nicolas Maudet	Ioannis Panageas
Rushang Karia	Kwan Hui Lim	Arne Meier	Carlos Pantoja
Ian Kash	Fangzhen Lin	Daniele Meli	Georgios Papsotiropoulos
Sammie Katt	Jiajing Ling	Felipe Meneguzzi	Pere Pardo Ventura
Mahdi Kazemi Moghaddam	Rory Lipkis	Roberto Micalizio	Simon Parsons
Bill Kennedy	Enrico Liscio	Evi Micha	Cezara Pastrav
Nina Khairova	Grzegorz Lisowski	Lukasz Mikulski	Alexandre Pauchet
Shakil Khan	Viliam Lisy	Tim Miller	Robert Penicka
Christopher Kiekintveld	Shengxin Liu	Reuth Mirsky	Giuseppe Perelli

Andrew Perrault	Magdalena Rychlowska	Patrick Taillandier	Chenhao Wang
Gauthier Picard	Nicolas Sabouret	Pavan Tallapragada	Xiao Wang
Sebastien Picault	Meghan Saephan	Allard Tamminga	Baoxiang Wang
Grzegorz Pierczyński	Indrajit Saha	Zongjun Tan	Weixun Wang
Georgios Piliouras	Erol Sahin	Alysa Ziyang Tan	Ning Wang
Carlo Pincioli	Yuko Sakurai	Zhi Tan	Shoujin Wang
Maria Silvia Pini	Victor Sanchez-Anguix	Hongyao Tang	Zhe Wang
Enrico Pontelli	Sanem Sariel	Martin Tappler	Yi Nicholas Wang
Daniele Porello	Giovanni Sartor	Joaquín Taverner	Tomasz Wąs
David Porfirio	Ichiro Satoh	Pankaj Telang	Christabel Wayllace
Nicos Protopapas	Ken Satoh	Kazunori Terada	Gerhard Weiss
Wei Qiu	Julien Saunier	Takao Terano	Muning Wen
Tim Quatmann	Bob Schadenberg	Swapna Thorve	Bryce Wiedenbeck
Alberto Quattrini Li	JeffSchank	Mourya Thummalapeta	Patrick Wienhöft
Zinovi Rabinovich	Ildikó Schlotter	Ilaria Tididi	Nils Wilde
Roxana Radulescu	Martin Schmid	Myrthe Tielman	Mark Wilson
Ritam Raha	Carsten Schuermann	Nils Tolksdorf	Sarah Wise
Muhammad Arrasy Rahman	Francois Schwarzentruher	Tomas Trescak	Stefan Woltran
Ravi Kant Rai	Guido Sciacicco	Vito Trianni	Xiaowei Wu
Anita Raja	Gian Luca Scoccia	Alan Tsang	Zhaoxuan Wu
Célia Ghedini Ralha	Paolo Serafino	Sebastian Tschitschek	Feng Wu
Bhaskar Ramasubramanian	Marc Serramia	Magdalena Tydrichova	Lirong Xia
Gabriel De O. Ramos	Eklavya Sharma	Sz-Ting Tzeng	Yaqi Xie
Brian Ravenet	Isaac Sheidlower	Suguru Ueda	Junliang Xing
Miguel Rebollo	Chen Shen	Vaibhav V Unhelkar	Mengwei Xu
Rebecca Reiffenhauser	Weiran Shen	Volkan Ustun	Xinyi Xu
Luis Paulo Reis	Craig Sherstan	Mauro Vallati	Yexiang Xue
Chao Ren	Longxiang Shi	Leon van der Torre	Yaodong Yang
Alessandro Renda	Dmitry Shkatov	Coert van Gemenen	Tianpei Yang
Jennifer Renoux	Yao Shu	M. Birna van Riemsdijk	Yongjie Yang
Mathieu Reymond	Sujoy Sikdar	Giovanna Varricchio	Yuan Yao
Jandson S. Ribeiro	Simeon Simoff	Stylios Loukas Vasileiou	William Yeoh
Alessandro Ricci	Jivko Sinapov	Javier Vazquez	Jialin Yi
Guendalina Righetti	Arunesh Sinha	Fernando R. Velázquez-Quesada	Neil Yorke-Smith
Maria Riveiro	Alexander Skopalik	Kristen Brent Venable	Sixie Yu
Ana Paula Rocha	Aletta Smits	Srinivasan Venkatramanan	Han Yu
Antonio Carlos Rocha Costa	Anthia Solaki	Rodrigo Ventura	Jing Yuan
Odinaldo Rodrigues	Tran Cao Son	Mor Vered	Zerrin Yumak
Sebastian Rodriguez	Chinmay Sonar	Pulkit Verma	Seyed Majid Zahedi
Juan Antonio Rodriguez Aguilar	Leandro Soriano Marcolino	Arun Verma	Rym Zalila-Wenkstern
Manel Rodríguez-Soto	Krzysztof Sornat	Paolo Viappiani	Muhammad Aneeq Zaman
Alessandro Ronca	Francesco Spinnato	Serena Villata	Franco Zambonelli
Willem Röpke	Sarath Sreedharan	Cosimo Vinci	Mahdi Zargayouna
Leonardo Rosa Amado	Mohan Sridharan	Meritxell Vinyals	Maicon Rafael Zatelli
Ariel Rosenfeld	Alexander Steen	Matthias Volk	Dongmo Zhang
Jörg Rothe	Roni Stern	Yevgeniy Vorobeychik	Min Zhang
Antonino Rotolo	Toshiharu Sugawara	Alexandros Voudouris	Wenbin Zhang
Michael Rovatsos	Marnix Suilen	Yi Wan	Dengji Zhao
Debraj Roy	Zhaohong Sun	Zhaodong Wang	Ming Zhou
Olivier Roy	Petras Swisler	Xihuai Wang	Kai Zhou
Sanjukta Roy	Stanisław Szufa	Shihan Wang	Shufang Zhu
Ramon Ruiz-Dolz	Cesar A. Tacla	Wanyuan Wang	Roie Zivan

Auxiliary Reviewers

Olga Abramov	Valentin Cassano	Timothy Flavin	Feiran Jia
Aadfa Adfa	Brittany Cates	Elliot Fosong	Nan Jiang
Zohreh Aghababaeyan	Davide Catta	Nicolas Fröhlich	Yinwen Jiang
Xing Ai	Viswanath Chadalapaka	Lingzhi Fu	Liu Jiashun
Abdullah Cihan Ak	Sotirios Chatzidimitriadis	Nishchal Hoysal G	Xiaoyue Jin
Abdulrahman Al-Shanoon	Pei-Yu Chen	Raffaele Galliera	Billy Jin
Ahmed Alagha	Cheng Chen	Chenxiao Gao	Fatema Tuj Johora
Benoît Alcaraz	Bin Chen	Roberto Garcia	Joanna Kaczmarek
Rawan Alfaiz	Jingxiao Chen	Nathan Gavenski	Jan-Christoph Kalo
Ebtisaam Alharbi	Feng Chen	Hosna Geraei	Marcelo Karanik
Fahad Aloraini	Xiong-Hui Chen	Jahir Alexander Argote Gerald	Sven Karbach
Suzana Alpsancar	Weizhe Chen	Carolina Gerlach	Stanisław Kaźmierowski
Mohammad Alsomali	Rex Chen	Fatemeh Ghaffari	Pim Kerkhoven
Batuhan Altundas	Michela Chessa	Sajjad Ghobadi	Yan Kim
Matheus Aparecido do Carmo Alves	Kiran Chhatre	Everardo Gonzalez	Krishna Kodur
Alessandro Amato	Francesco Chiariello	Alex Goodall	Simon Kolker
Antonio Andriella	Giorgos Chionas	Matthias Greger	Rui Kong
Thomas Archbold	Leonardo Cianfanelli	Charlie Griffin	Mert Kosan
Joaquín Arias	Theodor Cimpeanu	Angela Grimminger	Justin Kottlinger
Ryuta Arisaka	Colin Cleveland	Timo Philipp Gros	Longxin Kou
Leila Shams Ashkezari	Davide Corsi	Joschka Groß	Merlijn Krales
Ayhan Alp Aydeniz	Aurelio Costa	Sizhe Gu	Ondřej Kubíček
Oussama Azizi	Charles Costa	Nik Gurney	Sietze Kuilman
Seyed Ehsan Marjani Bajestani	Cyrus Cousins	Anselm Haak	Oksana Kulyk
Sourasekhar Banerjee	Abhik Datta	Ernst Moritz Hahn	Damian Kurpiewski
Timon Barlag	Esmacel Delfaraz	Lewis Hammond	Yuni Lai
Leandro Buss Becker	Daniele Dell'Erba	Peilong Han	Zhong Yuan Lai
Dylan Bellier	Zichao Deng	Byeolyi Han	Christian Laufmann
Michael Bernreiter	Siyu Deng	Kazi Injamamul Haque	Wei-Chen Lee
Raphaël Berthon	Paula Rodriguez Diaz	Amanul Haque	Kin Man Lee
Mickael Bettinelli	Eric Dignum	Johannes Haring	Zihao Li
Sukriti Bhattacharya	Feng Ding	Eden Hartman	Yang Li
Rafael Bianchi	Gaurav Dixit	Mohammadhosein Hasanbeig	Jinzhao Li
Federico Bianchi	Davide Domini	Sihong He	Shixi Lian
Linus Boes	Chris Shuyu Dong	Jinke He	Hebin Liang
Alexander Bork	Yinuo Du	Hsi-Ming Ho	Xiaolong Liang
Mathieu Bourgeois	Weizhi Du	Qi Heng Ho	Weijian Liao
Yann Bouteiller	Yingpeng Du	Simon Holk	Gabriel Paludo Licks
Gianluca Brero	Michal Dvořák	Thiago Homem	Yunfeng Lin
Samuele Burattini	Wolfgang Dvořák	Xiaohan Hu	Runze Liu
Emma Caizergues	Kasper Engelen	Xiaohan Hu	Haoxin Liu
João Caldeira	Enes Erdogan	Weiquan Huang	Mo Liu
Wenhan Cao	Jiarong Fan	Tosin Ige	Shanqi Liu
Zhe Cao	Jonathan Faris	Arda Inceoglu	Sha Liu
Daniele Carnevale	Alberto Fernandez	Kazi Ashik Islam	Guoqing Liu
Ana Carrasco	Simone Fioravanti	Mathias Jackermeier	Jinyi Liu
		Felix Jahn	

Liang Liu	Yuxin Pan	Shuqing Shi	Ziyan Wang
Eduardo Lopes	Dimitris Panagopoulos	Juan Shi	Dong Wang
Manuel Lopes	Georgios Papoudakis	Sudarshan Shyam	Tianze Wei
Tamlin Love	Gianmarco Parretti	Joe Shymanski	Xiaoyu Wen
Yun Lu	Maciej Paszynski	Rui Silva	Tobias Winkler
Yuxiang Luo	Dirk Pattinson	Amit Sinha	Junlin Wu
Kerkko Luosto	Soumyajit Paul	Joar Skalse	Chenyang Wu
Yi Ma	Gao Peng	Antonis Skarlatos	Zheng Xiong
Valentina Macchiati	Xueqiao Peng	Matthew Smith	Jiacheng Xu
Anirban Majumdar	Alessandro Poggiali	Karthik Soma	Yifan Xu
Avleen Malhi	MilošPrágr	Li Song	Feng Xu
David Manlove	Mateusz Przychozdzki	Stelios Stavroulakis	Kang Xu
Yi Mao	Jinbin Qiao	Vera Stebletsova	Di Xue
Enrico Marchesini	Zhenhao Qin	Alessandro Di Stefano	Xiao Yang
Benjamin Marsh	John Qin	Dariusz Stolicki	Zhao Yang
Lina Mavrina	Md Masudur Rahman	Ankang Sun	Long Yang
Sabrina McCallum	Naveen Raman	Bin Sun	Mingwei Yang
Daniel Melcer	Aniketh Ramesh	Mirko Tagliaferri	Rui Yang
Luckeciano Melo	Masood Feyzbakhsh Rankooh	Stephanie Tan	Chang Yang
Mashal Afzal Memon	Alan Raydan	Jiaqi Tan	Tangwei Ye
Hannah Mertens	Robert Reed	Shi Yuan Tang	Sean Ye
Chaima Messaoudi	Christopher Risi	Xiaoli Tang	Zhipeng Yin
David Milec	Amelie Robrecht	Igor Tchappi	Hang Yu
Genki Miyauchi	Maryam Rostamigiv	Stefano Tedeschi	Xudong Yu
Mohammadsadegh Mohagheghi	Rajarshi Roy	Douglas Tesch	Hongsheng Yu
Eladio Montero	Alexander Rutherford	Kale-Ab Tessera	Obaidullah Zaland
Jonathan Morag	Krzysztof Rykaczewski	Callum Rhys Tilbury	Tao Zeng
Argaman Mordoch	Régis Sabbadin	Georgios Tzoumas	Nicholas Zerbel
Chunjiang Mu	Sandeep Reddy Sabbella	Pascal van der Vaart	Yanci Zhang
Ronghui Mu	Suman Sadhukhan	Giovanni Varricchione	Yao Zhang
Karan Muvvala	Hani Sami	Vitor V. Vasconcelos	Su Zhang
Oliviero Nardi	Andrés R. Saravia	Ajith Vemuri	Libo Zhang
Md Nasim	Stefan Sarkadi	Aravind Venugopal	Yang Zhang
Maciej Nazarczuk	Anindya Sarkar	Miikka Vilander	Yudi Zhang
Hadi Nekoei	Nripsuta Saxena	Hendric Voß	Long Zhang
Ha-Thanh Nguyen	Md Abu Sayed	Joery de Vries	Eddie Zhang
Fei Ni	Mohamed Akram Sbaighdi	Sanyam Vyas	Wenhao Zhang
Gustav Nilsson	Lukas Schäfer	Jonathan Wagner	Zhenjie Zhao
Andrea Niu	Sören Schleibaum	Jianhong Wang	Yu Zhou
Paul Nüsken	Marco Schmalhofer	Jun Wang	Houyu Zhou
Stanley Obilikpa	Florian Schröder	Kaixin Wang	Yulin Zhu
Frans Oliehoek	Nicola Scianca	Tonghan Wang	Fengming Zhu
José C. Oliveira	Aditi Sethia	Ye Wang	Martin Zimmermann
Sorinel Oprisan	Kai Shao	Zichong Wang	May Myo Zin
Victor Hugo Contreras Ordoñez	Nazia Sharmin	Kevin Wang	Amirhossein Zolfagharian

Special Tracks Reviewers

Blue Sky Ideas Track

Raed Abuzitar	Jérôme Lang
Bo An	Viviana Mascardi
Ana Bazzan	Nicolas Maudet
Katrien Beuls	Frans Oliehoek
Bart Bogaerts	Julian Padget
Ulises Cortés	Liz Sonnenberg
Frank Dignum	Samarth Swarup
Btissam El Khamlichi	Pingzhong Tang
Michele Flammini	Matt Taylor
Maria Gini	Paolo Turrini
Youssef Hmamouch	Paul Van Hecke
Catholijn Jonker	

Demonstration Track

Ayodeji O. Abioye	Payam Mousavi
Tobias Ahlbrecht	Samer Nashed
Michael E. Akintunde	Gideon Ogunniye
Parantapa Bhattacharya	Yinghui Pan
Filippo Bistaffa	Gauthier Picard
Jan Buermann	Maria Silvia Pini
Rafael C. Cardoso	Roxana Rădulescu
Sukankana Chakraborty	Diederik M. Roijers
Sarel Cohen	Mohammad D. Soorati
Georgina Curto Rex	Leandro Soriano Marcolino
Mirgita Frasher	Alexandru Sorici
Simona Frenda	Charlie Street
Mehran Hosseini	Stefano Tedeschi
Fatema T. Johora	Zoi Terzopoulou
Timotheus Kampik	Alice Toniolo
Alexander Lam	Onuralp Ulusoy
Maite Lopez-Sanchez	Shihan Wang
Mahshid Mehr	Kai Wang
Roberto Micalizio	Selin Zileli

Doctoral Consortium

Noa Agmon	Nicolas Maudet
Natasha Alechina	Frans Oliehoek
Christopher Amato	Catherine Pelachaud
Leila Amgoud	Juan Antonio Rodriguez Aguilar
Elizabeth Black	Jeffrey S. Rosenschein
Rafael Bordini	Fernando Santos
Siobhan Clarke	Silvia Schiaffino
Ed Durfee	Sebastian Stein
Edith Elkind	Samarth Swarup
Piotr Faliszewski	Matthew E. Taylor
Enrico Gerding	Kagan Tumer
Maria Gini	Toby Walsh
Marc Lanctot	Michael Winikoff
Jérôme Lang	Lirong Xia
Birgit Lugin	Makoto Yokoo
Viviana Mascardi	

Awards

AUTONOMOUS AGENTS RESEARCH AWARD

The *ACM/SIGAI Autonomous Agents Research Award* is an annual award for excellence in research in the area of autonomous agents. The award is intended to recognise researchers in autonomous agents whose current work is an important influence on the field. It is an official ACM award, funded by an endowment created from the proceeds of the Autonomous Agents conferences.

Recipient: The selection committee for the ACM/SIGAI Autonomous Agents Research Award is pleased to announce that Professor Catholijn Jonker is the recipient of the 2024 award.

Citation: Professor Catholijn Jonker is full professor of Interactive Intelligence at the Faculty of Electrical Engineering, Mathematics, and Computer Science of the Delft University of Technology. Professor Jonker is a leader in the field of human-machine interaction, in particular regarding modeling the cognitive processes and concepts involved in negotiation and teamwork. Professor Jonker initiated the Automated Negotiating Agents Competition at AAMAS and IJCAI. She has also contributed to other research domains such as integrating interactive intelligence for hybrid intelligent systems. She is also very active in advancing research into value-sensitive and responsible AI. She is very much involved in promoting women in academic positions. She chaired the Network of Female Professors. She is a role model for many young researchers. Her research is highly visible and praised. Professor Jonker received numerous awards. She was the past President of IFAAMAS.

INFLUENTIAL PAPER AWARD

The *IFAAMAS Influential Paper Award* seeks to recognise publications that have made influential and long-lasting contributions to the field. Candidates for this award are papers that have proved a key result, led to the development of a new subfield, demonstrated a significant new application or system, or simply presented a new way of thinking about a topic that has proved influential.

This year's award committee selected two papers (not ordered) to be recognised with an IFAAMAS Influential Paper Award.

Paper: Peyman Faratin, Carles Sierra, Nicholas R. Jennings. Negotiation decision functions for autonomous agents. *Robotics and Autonomous Systems*, Vol. 24, No. 3-4, pp. 159–182, 1988.

Citation: Faratin, Sierra, and Jennings published a highly influential contribution to agent research through a seminal article on agent negotiation. As of today, the article has received 1681 citations. Together with Rosenschein's and Zlotkin's "Rules of Encounter," this article set the foundations for the field of automated negotiation

and nowadays underpins most of the current research on the topic. In fact, the research issues posed in the article continue to guide the research on agent negotiation. As a matter of fact, the aims of the "Automated Negotiating Agents Competition", run in the realm of the AAMAS conference (since 2010), were already outlined in this paper. The recent interest in Diplomacy and the Hanabi challenge has revived the interest in agent negotiation, which is called to play a fundamental role in cooperative artificial intelligence in the future.

Paper: Leonid Peshkin, Kee-Eung Kim, Nicolas Meuleau, Leslie Pack Kaelbling. Learning to cooperate via policy search. In: *Proceedings of the 16th Conference on Uncertainty in Artificial Intelligence*, Stanford, California, pages 489–496, July 2000.

Citation: This paper makes a simple, but critical observation: in decentralized settings, like Dec-POMDP, the 'policy gradient' is decentralizable. This means that when taking the normal centralized policy gradient and inspecting what information is needed to update the parameters of some agent i , it turns out that this gradient does not depend on any information of other agents. This is a very important result, because it implies that agents can implement decentralized learning - only needing to observe the team reward - with guarantees of converging to a local optimum. This stands in stark contrast to value-based methods, such as Q-learning using individual information, for which no such results are known. It also provides an explanation of the large success that actor-critic methods have been having in recent years, and has been a key building block in many methods.

DISTINGUISHED DISSERTATION AWARD

The *Victor Lesser Distinguished Dissertation Award* is given for dissertations in the field of autonomous agents and multiagent systems that show originality, depth, impact, as well as quality of writing, supported by high-quality publications.

The recipient of the 2023 IFAAMAS Victor Lesser Distinguished Dissertation Award is Dr. Niclas Boehmer, whose thesis entitled "Application-Oriented Collective Decision-Making: Experimental Toolbox and Dynamic Environments" was supervised by Prof. Rolf Niedermeier and by Dr. Markus Brill at TU Berlin. The selection committee also decided to recognise two further nominees (not ordered), namely Dr. Gabriele Farina for his thesis "Game-Theoretic Decision Making in Imperfect-Information Games: Learning Dynamics, Equilibrium Computation, and Complexity" supervised by Prof. Tuomas Sandholm at Carnegie Mellon University, and Dr. Evi Micha for his thesis "Fair and Efficient Social Decision Making" supervised by Dr. Nisarg Shah at the University of Toronto.

BEST PAPER AWARDS

Amongst the many excellent submission received, the conference will honour two of the full papers in the main track with awards: the *Best Paper Award* (for which all papers are eligible), and the *Pragnesh Jay Modi Best Student Paper Award* (for a paper with a principal author who is a student).

The three papers listed below are finalists for the *Best Paper Award*:

- Yaoxin Ge, Yao Zhang, Dengji Zhao, Zhihao Gavin Tang, Hu Fu and Pinyan Lu. Incentives for Early Arrival in Cooperative Games.
- Evan Albers, Mohammad Irfan and Matthew Bosch. Beliefs, Shocks, and the Emergence of Roles in Asset Markets: An Agent-Based Modeling Approach.
- Grant Forbes, Nitish Gupta, Leonardo Villalobos-Arias, Colin Potts, Arnav Jhala and David Roberts. Potential-Based Reward Shaping for Intrinsic Motivation.

The three papers listed below are finalists for the *Pragnesh Jay Modi Best Student Paper Award*:

- Junqi Jiang, Francesco Leofante, Antonio Rago and Francesca Toni. Recourse under Model Multiplicity via Argumentative Ensembling.
- Gauri Gupta, Ritvik Kapila, Ayush Chopra and Ramesh Raskar. First 100 days of pandemic; an interplay of pharmaceutical, behavioral and digital interventions - A study using agent based modeling.

- Chenyuan Zhang, Charles Kemp and Nir Lipovetzky. Human Goal Recognition as Bayesian Inference: Investigating the Impact of Actions, Timing, and Goal Solvability.

The winners will be announced during the conference banquet.

The Pragnesh Jay Modi Best Student Paper Award is generously supported by Springer.

BLUE SKY IDEAS AWARD

The focus of the Blue Sky Ideas track is on visionary ideas, long-term challenges, new research opportunities, and controversial debate. It serves as an incubator for innovative, risky, and provocative ideas, and it aims at providing a forum for publishing and presenting such ideas without being constrained by the result-oriented standards followed for the main track of the conference.

At the conference, one of the papers submitted to this special track will receive the *Blue Sky Ideas Award*.

The Blue Sky Ideas track is generously supported by the Computing Community Consortium (CCC).

BEST DEMO AWARD

The *Best Demo Award* will be bestowed upon the authors of the most applicable and innovative contribution to the Demonstration track. The winner will get announced during the conference banquet.

Sponsors & Supporters

