## **Workshop on Game Theory and Machine Learning**

LSE, Columbia House (69 Aldwych), 1st floor Conference Room

## Th-Fr 19-20 October 2023

funded by the CIVICA project EquiLearn (LSE, Bocconi, Stockholm School of Economics) hosted by the LSE Data Science Institute

## Thursday 19 October 2023

9:15 - 9:30	Welcome
9:30 - 10:30	Ted Turocy, University of East Anglia, and Rahul Savani,
	University of Liverpool and The Turing
	Automated Analysis of Strategic Interactions: The Roadmap
	for Gambit 17 and Beyond
10:30 - 10:50	Discussion
10:50 - 11:20	Coffee Break
11:20 - 12:00	Galit Ashkenazi-Golan, Katerina Papadaki, Bernhard von
	Stengel, Sahar Jahani, and Edward Plumb, LSE
	What We Learned from EquiLearn
12:00 - 12:30	Discussion
12:30 - 14:00	Lunch
14:00 - 14:30	Yongzhao Wang, The Turing
	An Introduction to Empirical Game-Theoretic Analysis
14:30 - 14:45	Discussion
14:45 - 15:15	Konstantinos Varsos, The Turing
	Forward Looking Best-Response Multiplicative Weights
	Update Methods for Bilinear Zero-Sum Games
15:15 - 15:30	Discussion
15:30 - 15:45	Coffee Break
15:45 - 16:15	Clemens Possnig, University of Waterloo
	Strategic Communication and Algorithmic Advice
16:15 - 16:30	Discussion
16:30 - 17:00	General Discussion
17:00	End of day 1
19:00	Workshop Dinner

Friday 20 October 2023	
9:15 - 9:45	Dominik Karos, University of Bielefeld
	From Prejudice to Racial Profiling and Back
9:45 - 10:00	Discussion
10:00 - 10:30	Andrea Celli, Bocconi University
	No-Regret Learning in Bilateral Trade via Global Budget Balance
10:30 - 10:45	Discussion
10:45 - 11:00	Coffee Break
11:00 - 11:30	Maryam Kamgarpour, EPFL Lausanne
	Learning Equilibria with Payoff-Based Information
11:30 - 11:45	Discussion
11:45 - 12:15	Cesare Carissimo, ETH Zurich
	Cooperative Outcomes of Q-Learning in Congestion Games
12:15 - 12:30	Discussion
12:30 - 14:00	Lunch
14:00 - 14:30	Bei Peng, University of Liverpool
	Overcoming Relative Overgeneralisation for Cooperative
	Multi-Agent Reinforcement Learning
14:30 - 14:45	Discussion
14:45 - 15:15	Stefanos Leonardos, King's College London
	Exploration-Exploitation in Multi-Agent Learning
15:15 - 15:30	Discussion
15:30 - 15:45	Coffee Break
15:45 - 16:15	Maria Polukarov, King's College London
	Reaching Collective Decisions
16:15 - 16:30	Discussion
16:30 - 17:00	General Discussion
17:00	Workshop ends