

Conference on Learning Theory 2024: Preface

Shipra Agrawal
Columbia University

SA3305@COLUMBIA.EDU

Aaron Roth
University of Pennsylvania

AAROTH@CIS.UPENN.EDU

Editors: Shipra Agrawal and Aaron Roth

This proceedings contains the 160 papers that were accepted for publication at the 37th annual Conference on Learning Theory (COLT 2024), held in Edmonton, Canada, on June 30-July 3, 2024. Each paper was allotted a 12-minute talk at the conference as well as a poster presentation. In person attendance was strongly encouraged; Authors who could not attend due to unavoidable visa issues were given the opportunity to record a 15 minute video which was made available on the COLT 2024 website.

The papers were selected from a total of 448 submissions, which have each been reviewed by an expert program committee. The committee consisted of 137 senior PC members who both contributed reviews and oversaw the review process, and 214 additional PC members who contributed reviews. The proceedings also include 9 open problems that were selected from 17 submissions by the open problems chair Tim van Erven.

The best paper award was shared between two papers: “The Price of Adaptivity in Stochastic Convex Optimization” by Yair Carmon and Oliver Hinder, and “Smoothed Analysis for Learning Concepts with Low Intrinsic Dimension” by Gautam Chandrasekaran, Adam Klivans, Vasilis Kotronis, Raghu Meka, and Konstantinos Stavropoulos. The Mark Fulk best student paper award was given to “Improved Hardness Results for Learning Intersections of Halfspaces” by Stefan Tiegel. The decisions on the awards were made with the help of a prize committee consisting of senior PC members who nominated papers for awards.

In addition to the contributed papers, the conference program also included three keynote talks: “When calibration goes awry: hallucination in language models” by Adam Tauman Kalai, “Algorithmic game theory in LLM alignment” by Michal Valko, and “New Connections Between Online Learning and Game Theory” by Constantinos Daskalakis. Local organization was handled by the local chair Csaba Szepesvári. The sponsorship chairs were Benjamin Guedj and Karthik Sridharan. We thank the COLT steering committee for their support throughout the organization process: the president Peter Bartlett and the directors Shipra Agrawal, Nika Haghtalab, Akshay Krishnamurthy, Ankur Moitra, Matus Telgarsky, and Tim Van Erven, the co-Treasurers Pranjal Awasthi and Surbhi Goel, The information officer Daniel Hsu, and the secretary Sasha Rakhlin. We finally thank the publication chair Wojciech Kotłowski for his help with putting the proceedings together.