

Conference on Learning Theory 2023: Preface

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This proceedings contains the 164 papers that were accepted for publication at the 35th annual Conference on Learning Theory (COLT 2023), held in Bangalore, India, on July 12-15, 2023. Each paper was allotted a 12-minute talk at the conference as well as a poster presentation. Authors who could not attend in person presented their contributions in a 5-minute video recording and had the opportunity to participate in a virtual Q&A session to discuss their papers.

The papers were selected from a total of 474 submissions, which have been each reviewed by an expert program committee. The committee consisted of 107 senior members who oversaw the review process, and 323 junior members who contributed with reviews. The proceedings also include 5 open problems that were selected from 12 submissions by the open problems chair Tim van Erven.

The best paper award was given to the paper titled “Bagging is an Optimal PAC Learner” by Kasper Green Larsen, and the Mark Fulk best student paper award was shared by “A Pretty Fast Algorithm for Adaptive Private Mean Estimation” by Rohith Kuditipudi, John Duchi and Saminul Haque Two, and “Fast, Sample-Efficient, Affine-Invariant Private Mean and Covariance Estimation for Subgaussian Distributions” by Gavin Brown, Samuel Hopkins, and Adam Smith. The decisions on the awards were made with the help of a committee consisting of past COLT chairs.

In addition to the contributed papers, the conference program also included two keynote talks: “Offline Reinforcement Learning with Linear Programming” by Asuman Özdaglar (Massachusetts Institute of Technology) and “How to Define Model Estimation Uncertainty for Nonlinear Function Classes” by Tong Zhang (Hong Kong University of Science and Technology).

Local organization matters were handled by the local chairs Prateek Jain, Praneeth Netrapalli, and Aditya Gopalan. The remote presentations were facilitated by the virtual experience chairs Surbhi Goel and Ellen Vitercik, and in-person participation was enhanced by the non-virtual experience chair Akshay Krishnamurthy. Organizing the conference would not have been possible without the generous support of our sponsors: Google, DeepMind, Microsoft, Apple, and the IISc-Kotal AI Center. We thank the sponsorship chair Benjamin Guedj for arranging these contributions.

Finally, we would like to thank the COLT steering committee for their support and advice given throughout the organization process: the presidents Peter Grünwald and Peter Bartlett, the directors Shipra Agrawal, Nika Haghtalab, Akshay Krishnamurthy, Ankur Moitra, and Maxim Raginsky, the treasurers Pranjal Awasthi and Vitaly Feldman, the secretary Sasha Rakhlin, and the information officer Daniel Hsu. We finally thank the publication chair Wojciech Kotłowski for his help with putting the proceedings together.