

## Conference on Learning Theory 2015: Preface

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These proceedings contain the 70 papers accepted to and presented at the 28th Conference on Learning Theory (COLT), held in Paris, France on July 2–6, 2015. These papers were selected by the program committee with additional help from external expert reviewers from 180 submissions. Of the 70 papers, 19 were given a 20-minute presentation, the remaining 51 a 5-minute presentation. All authors were given the opportunity to present a poster of their paper as well.

These proceedings also contain the six open problems selected from among nine submissions. Selection of the open problems was handled by the Open Problem Chair, Jacob Abernethy, based on reviews of the submissions by three additional external reviewers.

In addition to the papers and open problems published in these proceedings, the conference program also included three invited talks, one by Tim Roughgarden titled “Applications of Learning Theory in Algorithmic Game Theory”, one by Daniel Spielman titled “Laplacian Matrices of Graphs: Algorithms and Applications”, and one by Cédric Villani titled “Synthetic theory of Ricci curvature - when information theory, optimization, geometry and gradient flows meet”.

The paper “An Almost Optimal PAC Algorithm” by Hans-Ulrich Simon received the best paper award. There were still several candidates for the best student paper award at the time of writing these proceedings; the final decision was made during the conference, also based on the quality of presentation.

The local arrangements chair was Vianney Perchet and the publication chair was Satyen Kale. We would like to express our gratitude to the entire program committee and to the external reviewers for their invaluable contributions to the success of conference.

Finally, we would like to thank our generous sponsors: Labex Ecodec Chaire Havas, Microsoft Research Joint Center Inria, Huawei Research Labs, Chaire Big Data, Telecom ParisTech, CMLA, ENS Cachan, Facebook, Google, GdR Jemma, Microsoft Research, CNRS Institut INS2I, LPMA Paris Diderot & UPMC, Criteo, PGMO Foundation Jacques Hadamard & EDF, Machine Learning Journal GdR MOA, Yahoo! Labs. We would also like to acknowledge the technical support of the Foundation Sciences Mathématiques de Paris, and of University Pierre and Marie Curie.

Peter Grünwald and Elad Hazan

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