

Preface

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This volume contains the Proceedings of the Seventh Symposium on Conformal and Probabilistic Prediction with Applications (COPA 2018), co-organised by Royal Holloway, University of London, UK, and Maastricht University, The Netherlands. This year the Symposium is held at Maastricht University on June 11–13, 2018.

For general information about conformal prediction and its sister method Venn prediction, see the preface to the [Proceedings of COPA 2017 \(volume 60 of the PMLR\)](#).

Overall, 16 papers have been accepted for publication in the Proceedings of Machine Learning Research. The papers can be roughly divided into four groups:

- conformal and Venn prediction;
- applications of conformal and Venn prediction in drug discovery and medicine;
- transfer learning;
- other methods of probabilistic and probability-free prediction.

In addition, ten posters have also been accepted for presentation at the Symposium. The Symposium starts from a tutorial day (June 11):

- “Confidence Prediction: Introduction to Conformal Prediction” (Lars Carlsson and Henrik Linusson);
- “Probabilistic prediction: Venn-ABERS prediction” (Paolo Toccaceli);
- “Conformal Instance Transfer” (Shuang Zhou).

As a part of COPA 2018 programme, one of the most world-renowned computer scientists, Vladimir Vapnik, is to deliver the University of London Kolmogorov Lecture “Rethinking Statistical Learning Theory: Learning Using Statistical Invariants” and receive the Kolmogorov Medal on 11 June 2018. The Kolmogorov lecture was launched by the Centre for Machine Learning (CML, also known as CLRC) at Royal Holloway, University of London, which celebrates its 20th anniversary this year. This year the Kolmogorov lecture is organised in cooperation with the Department of Data Science and Knowledge Engineering, Maastricht University. An invitation to give a Kolmogorov Lecture acknowledges life-long

research contributions to one of the fields initiated or transformed by Kolmogorov. Past lecturers range from the late Professor Ray Solomonoff, the inventor of algorithmic probability and founder of the algorithmic information theory, given in 2003, to Professor Robert Merton, the 1997 Nobel Prize winner, given in 2010.

To complete the picture, there is also one invited talk by Peter Grünwald on “Safe Testing”.

We are very grateful to the Programme and Organising Committees; the success of the Symposium would have been impossible without their hard work. We are also indebted to the sponsors: Royal Holloway University of London, Maastricht University, Universiteitsfonds Limburg, and SIKS. We are especially grateful to Yandex for their support of the Kolmogorov Lecture.

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