

Probabilistic Graphical Models

PGM 2024 
Nijmegen

Proceedings of the 12th International
Conference

PMLR Proceedings of Machine Learning Research
Volume 246

Nijmegen, the Netherlands

September 11–13, 2024

Preface

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The International Conference on Probabilistic Graphical Models (PGM) is a biennial meeting that brings together researchers interested in all aspects of graphical models for probabilistic reasoning, decision making, and learning. It provides a forum for discussion of the latest research developments, both theoretical and applied, in these fields.

Previous PGM meetings were held in Cuenca, Spain (2002); Leiden, The Netherlands (2004); Prague, Czech Republic (2006); Hirtshals, Denmark (2008); Helsinki, Finland (2010); Granada, Spain (2012); Utrecht, The Netherlands (2014); Lugano, Switzerland (2016); Prague, Czech Republic (2018); Aalborg, Denmark (2020, hybrid); and Almería, Spain (2022). The

Twelfth International Conference on Probabilistic Graphical Models

was held in Nijmegen, The Netherlands, on September 11th – 13th, 2024. The 32 papers presented at the conference and included in these proceedings were selected from 40 submitted manuscripts. Each submission underwent rigorous reviewing by three members of the PGM Programme Committee (PC), with each PC member reviewing at most three papers. All papers were presented in a plenary session at the conference. In addition to the presentation of the technical papers, we were honoured to have two invited presentations by Arto Klami (Helsinki University) on 'Prior distributions – how should we really choose them?' and Sara Magliacane (University of Amsterdam) on 'Causal representation learning in temporal settings'. Prior to the PGM, on September 10th, Radboud University organized a co-located informal workshop on PGMs in healthcare.

We would like to express our gratitude to all those who helped us in making PGM 2024 a success. We owe a big thank-you to all the members of the Programme Committee for their efforts, and their punctual and high quality reviews; these reviews were most instrumental in selecting which papers to accept for presentation during the conference, which to (conditionally) accept for inclusion in these proceedings, and which to nominate for the best student paper award. And, last but not least, we are most indebted to our sponsors for their financial support.

Conference Organization

PGM 2024 was hosted in Nijmegen, The Netherlands. The conference was organized by members of the Donders Institute of Radboud University, Nijmegen, together with members of Utrecht University's Department of Information and Computing Sciences, with support provided by Radboud University.

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Johan Kwisthout (*Radboud University*) & Silja Renooij (*Utrecht University*)

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