

ISIPTA 2023: Preface

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The ISIPTA meetings are the primary international forum for presenting and discussing advances in the theory and applications of imprecise probabilities. They are organized once every two years by SIPTA, The Society for Imprecise Probabilities: Theories and Applications. The first edition took place in Ghent in 1999 and the 2021 edition was held as a hybrid conference in Granada, due to the COVID-19 crisis. This year, about 80 participants from 15 different countries will come together again in-person in Oviedo (Spain) for the

13th International Symposium on Imprecise Probabilities: Theories and Applications.

After a careful reviewing process, 42 papers and 27 poster abstracts will be presented at ISIPTA 2023. These are all available at the conference website (<https://isipta23.sipta.org/>). This volume of the Proceedings of Machine Learning Research includes all the accepted papers. As is a tradition at ISIPTA, each contribution will be presented twice: first in a plenary session and then as a poster, with the goal of encouraging scientific discussion between the participants in an informal atmosphere.

We are pleased to have three renowned invited speakers at ISIPTA 2023, Marta Kwiatkowska, Michel Grabisch and Gert de Cooman:

- *Marta Kwiatkowska* is Professor of Computing Systems and Fellow of Trinity College, University of Oxford. She is known for fundamental contributions to the theory and practice of model checking for probabilistic systems, focusing on automated techniques for verification and synthesis from quantitative specifications.
- *Michel Grabisch* is full professor of Computer Sciences at Université Paris I Panthéon-Sorbonne, honorary senior member of the Institut Universitaire de France, and head of the Micro-Economic Theory group at Centre d’Economie de la Sorbonne. He is an expert on decision making, game theory, networks, opinion dynamics, and discrete mathematics.
- *Gert de Cooman* is a Senior Full Professor in Uncertainty Modelling and Systems Science, and head of the Foundations Lab for imprecise probabilities at Ghent University, Belgium. He is one of the founding members and a former President of SIPTA. His research interests include the foundational and mathematical aspects of imprecise probability models.

Another highlight of ISIPTA 2023 will be the *homage to Terrence Fine*, one of the founding fathers of imprecise probability theory, who passed away in January 2021. We would like to thank Stephen Wicker, Pablo Fierens, Anurag Kumar, Yves-Laurent Grize, Sayandev Mukherjee, Adrian Papamarcou, Teddy Seidenfeld and the family of Professor Fine for their valuable contributions.

At the closing ceremony of ISIPTA 2023 the recipients of the *IJAR Young Researcher Award* and the *Poster Awards* will be revealed. The first is given to a student, or students, who demonstrate excellence in research at an early stage of the scientific career, and it is sponsored by Elsevier’s International Journal of Approximate Reasoning. The second is sponsored by Wiley and Springer, and is given to those authors giving high-quality poster presentations.

We would also like to express our gratitude for its financial support to the Artificial Intelligence Journal—which has granted 4 fellowships to facilitate the attendance of PhD students—to the Department of Statistics and Operations Research and the School of Sciences of the University of Oviedo, and to Caja Rural.

The organization of ISIPTA 2023 has only been possible thanks to the joint efforts of a number of people: Fabio Cozman and Jasper de Bock for their guidance in the steering committee; Inés Couso, Denis Mauá and Paolo Vicig as jury of the IJAR Young Researcher Award; Alexander Erreygers, Ruobin Gong, Raúl Pérez-Fernández and Davide Petturiti as members of the poster jury; and Agustina Bouchet, Susana Díaz, Arís Fanjul, Irene Mariñas, Susana Montes and Juan Jesús Salamanca as members of the local organizing committee. In addition, we would like to thank all 80 members of the Program Committee for their careful work in the reviewing process.

Our final words of appreciation are directed towards the authors of the contributions presented at ISIPTA 2023. If a conference can only be as good as the work presented in it, the scientific advances collected in these proceedings allow us to call ISIPTA 2023 a success. We are honored to serve as a vehicle for their dissemination and eager for what is yet to come; we hope that you, esteemed reader, shares our excitement.

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