

**AI<sup>3</sup> 2022**  
**Workshop on Advances in Argumentation in**  
**Artificial Intelligence**

Proceedings of the 6th Workshop on  
Advances in Argumentation in Artificial Intelligence  
(AI<sup>3</sup> 2022)

Co-located with AIXIA 2022

Udine, Italia, 28 November 2022

Edited by

Roberto Confalonieri | Daniele Porello

# PREFACE

This volume contains the papers presented at the 6th Workshop on Advances in Argumentation in Artificial Intelligence (AI<sup>3</sup> 2022), held in Udine, Italy, on 28 November 2022.

AI<sup>3</sup> 2022 was the 6th edition of the Workshop on Advances in Argumentation in Artificial Intelligence series, a venue that provides opportunities for stakeholders from the academia and industry to present their latest developments in argumentation theory. The goal of the workshop is to stimulate discussions and promote scientific collaboration among researchers not only directly involved in argumentation, but also from research fields indirectly related to argumentation including non-monotonic reasoning, logic programming, linguistics, natural language processing, philosophy and psychology, just to mention a few of them.

The workshop was co-located with the 21st International Conference of the Italian Association for Artificial Intelligence, the yearly AI conference of researchers, students, and industry professionals dealing with various aspects of AI in Italy. AIxIA 2022 took place in Udine, from 28 November to 02 December 2022. AI<sup>3</sup> 2022 was mainly held in presence, although some participated in the event remotely.

We received 15 submissions out of which 7 papers were accepted as regular papers, and 6 as short papers and/or extended abstracts. AI<sup>3</sup> 2022 offered an interesting and diverse program, which in addition to the technical papers, included an invited talk by Nicolas Maudet (Pierre and Marie Curie University, Paris) on “Inverse problems in argumentation”. The invited talk by Nicolas Maudet was streamed.

We are very grateful to the Program Committee for their invaluable efforts in providing helpful and informative reviews for all submissions in a timely fashion. Finally, special thanks go to Stefano Bistarelli (Università di Perugia) and Massimiliano Giacomin (Università di Brescia) for their support during the organisation of the event, and to the General and Local Chairs of AIxIA 2022, for their engagement in the local organisation and constant support during the co-location.

*February 2023*

*Roberto Confalonieri  
Daniele Porello*

# ORGANISATION

We list below the people who contributed to the organization of the AI<sup>3</sup> 2022 workshop.

## Program Chairs

- Roberto Confalonieri, Dipartimento di Matematica ‘Tullio Levi-Civita’, Università degli Studi di Padova, Italy.
- Daniele Porello, Dipartimento di Antichità, Filosofia e Storia, Università di Genova, Italy.

## Program Committee

- Gianvincenzo Alfano (University of Calabria)
- Pietro Baroni (University of Brescia)
- Stefano Bistarelli (University of Perugia)
- Fabio Aurelio D’Asaro (University of Milan)
- Bettina Fazzinga (ICAR-CNR Rende)
- Stefano Ferilli (University of Bari)
- Sergio Flesca (University of Calabria)
- Massimiliano Giacomini (University of Brescia)
- Sergio Greco (University of Calabria)
- Marco Lippi (University of Modena and Reggio Emilia)
- Luca Longo (Dublin Institute of Technology)
- Fabrizio Macagno (Universidade Nova de Lisboa)
- Francesco Parisi (University of Calabria)
- Francesco Santini (University of Perugia)
- Paolo Torroni (University of Bologna)
- Mauro Vallati (University of Huddersfield)