Preface

This volume contains 8 papers among those accepted and presented as "discussion papers" at the 22nd International Conference of the Italian Association for Artificial Intelligence (AIxIA 2023), the primary scientific event of the Associazione Italiana per l'Intelligenza Artificiale (AIxIA). AIxIA is very active in organizing scientific initiatives as well as events for the dissemination of Artificial Intelligence in industry, society, and schools. Among these activities, a scientific international conference has been organized every two years since 1991 and then yearly since 2015.

AIxIA 2023 was held in Rome, Italy, during November 6-9, hosted by the University of Roma Tre. The event took place on the occasion of the centenary of the foundation of the National Research Council of Italy (CNR) and was curated by CNR and the three main public universities of Rome, "La Sapienza", "Tor Vergata" and "Roma Tre". The conference had a main track, which included position paper presentations, 19 co-located workshops and a doctoral consortium, for a total of more than 250 presentations. AIxIA 2023 featured renowned keynote speakers. Specifically, three keynote talks were presented: "Chatting with a Generative AI: A Personal Review" by Bernardo Magnini, "The Evolution of Artificial Intelligence in Italy: A Personal Journey" by Luigia Carlucci Aiello, and "Artificial Intelligence: Some Thoughts?" by Stuart J. Russell. The conference agenda also included a tutorial on "Trustworthy AI and Medicine" by Pietro Liò, a tutorial on "Process Mining and AI" by Chiara Ghidini, an invited talk by Oliviero Stock, a panel dedicated to FAIR, the largest AI project in Italy financed by the Italian Ministry of University and Research through the National Recovery and Resilience Plan (PNRR), and two satellite events: a public gathering titled "Artificial Intelligence: Instructions for Use", focused on the impact of generative AI on schools and younger generations, and an event dedicated to the connections between AI and the business and industrial world.

The organization benefited from Platinum sponsorships from Altilia, Entopan, DNA:LAB, Harmonic Innovation Group, Intellimech, NTT DATA, Revelis, Supermicro, and Talia, Gold sponsorships from Eustema, DLVSystem, OpenEconomics, Relatech, and Reveal, and Bronze sponsorships from Babelscape. The conference was also supported by the Artificial Intelligence Journal. We would like to extend our appreciation to several institutions and sponsors who generously supported AIxIA 2023. We are also grateful for the consistent assistance provided by the AIxIA Executive Board and extend our thanks to Rector Massimiliano Fiorucci of Roma Tre University for granting us the opportunity to host the conference at the Department of Civil Engineering, Computer Science, and Aeronautical Technologies. Furthermore, we wish to express our gratitude to the authors who submitted high-quality research papers, the members of the Program Committee, and the additional reviewers for their diligent efforts in evaluating the submitted papers impartially. We would also like to acknowledge the contributions of all students for their help in the practical management of the conference. Finally, special thanks are also due to Workshop and Tutorial chairs, Andrea Brunello and Danilo Croce, as well as Doctoral Consortium chairs, Valentina Poggioni and Silvia Rossi, for their invaluable contributions in creating an engaging program for AIxIA 2023.

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