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Preface

The “Università degli Studi di Palermo” in Italy hosts the eleventh edition of the “International Conference on Complex Networks and Their Applications” (COMPLEX NETWORKS 2022) from November 8 to November 10, 2022. Every year, COMPLEX NETWORKS brings together researchers from various scientific backgrounds to review the field’s current state and formulate new directions. The diversity of the attendees’ scientific interests (Finance, Medicine and Neuroscience, Biology and Earth Sciences, Sociology and Politics, Computer Science and Physics, etc.) is a unique opportunity for crossfertilization between fundamental issues and innovative applications.

This edition attracted authors from all over the world, with 313 submissions from 54 countries. Each submission has been peer-reviewed by at least three independent reviewers from the international program committee. The 104 papers included in the proceedings result from this rigorous selection process.

The quality of the contributors is undoubtedly an essential element for a successful edition. The success also goes to the keynote speakers. These leaders and visionaries in their fields present fascinating plenary lectures with big-picture ideas and unique perspectives to help attendees deepen their understanding of scientific challenges. We are delighted to bring together this great line-up of speakers.

- Luís A. Nunes Amaral (Northwestern University, USA)
- Manuel Cebrian (Max Planck Institute for Human Development, Germany)
- Shlomo Havlin (Bar-Ilan University, Israel)
- Giulia Iori (City, University of London, UK)
- Melanie Mitchell (Santa Fe Institute, USA)
- Ricard Solé (Universitat Pompeu Fabra, Spain)

Our thanks also go to the speakers of the traditional tutorial sessions for delivering insightful talks on November 7, 2022.

- Michele Coscia (IT University of Copenhagen, Denmark)
- Adriana Iamnitchi (Maastricht University, Netherlands)

The success also relies in the deep involvement of many individuals, institutions, and sponsors.

We sincerely gratify the advisory board members for inspiring the essence of the conference:

Jon Crowcroft (University of Cambridge), Raissa D’Souza (University of California, Davis, USA), Eugene Stanley (Boston University, USA), and Ben Y. Zhao (University of Chicago, USA)

We record our thanks to our fellow members of the organizing committee:

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These volumes make the most advanced contribution of the international community to the research issues surrounding the fascinating world of complex networks. Their breath, quality, and novelty demonstrate the profound impact of complex networks in understanding our world. We hope you enjoy the papers as much as we enjoyed organizing the conference and putting this collection of articles together.

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