Adam Wierzbicki · Ulrik Brandes
Frank Schweitzer · Dino Pedreschi (Eds.)

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# Advances in Network Science

12th International Conference and School, NetSci-X 2016
Wroclaw, Poland, January 11-13, 2016
Proceedings

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# Preface

Network science is an emerging discipline concerned with the study of network models in domains ranging from biology and physics to computer science, from financial markets to cultural integration, and from social media to infectious diseases. It is also an essential tool in the understanding of many kinds of big data, leading to numerous practical applications. Network models help researchers and practitioners make sense of an increasingly complex world, especially regarding social phenomena mediated through information technology. This volume contains several contributions to research in the area of network science, selected from the best submissions to the NetSci-X 2016 conference. The conference acceptance rate for full papers was 20 %. The International Conference and School of Network Science (NetSci) is an interdisciplinary event, gathering all researchers interested in network science. After 11 editions, the conference is the largest and best known event in the area. Published for the first time in the *Lecture Notes in Computer Science* series, the volume preserves the interdisciplinary character of network science, while emphasizing its connection to computer science. Works of researchers of various backgrounds, such as the social sciences, biology, economics, and computer science, unite in the aim for a better understanding of complex networks. The development of better models of complex phenomena, such as complex networks, is in itself an important contribution to computer science. The use of such computational models can enhance existing information technology, as well as expand the scope of applications of information technology into new areas. For this reason, the study of network science can be beneficial to computer scientists, and advances in network science can be considered as advances in computer science.

November 2016

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NetSci-X 2016 was organized by the Department of Computational Intelligence, Faculty of Computer Science and Management, Wrocław University of Technology.

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