1. Record Nr.	UNINA9910555092003321
Autore	Doreian Patrick
Titolo	Advances in network clustering and blockmodeling / / edited by Patrick Doreian, Vladimir Batagelj, Anuska Ferligoj
Pubbl/distr/stampa	Hoboken, NJ : , : Wiley, , 2020
ISBN	1-119-22467-5
	1-119-48329-8
	1-119-22468-3
Edizione	[1st edition]
Descrizione fisica	1 online resource (428 pages)
Collana	Wiley Series in Computational and Quantitative Social Science
Disciplina	302.3
Soggetti	Social networks - Mathematical models
	Sociometry
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Bibliometric analyses of the network clustering literature / Vladimir Batagelj, Anuska Ferligoj, and Patrick Doreian -- Clustering approaches to networks / Vladimir Batagelj -- Different approaches to community detection / Martin Rosvall, JeanCharles Delvenne, Michael T. Schaub, and Renaud Lambiotte -- Label propagation for clustering / Lovro Subelj -- Blockmodeling of valued networks / Carl Nordlund and Ales Ziberna -- Treating missing network data before partitioning / Anja Znidar sic, Patrick Doreian, and Anuska Ferligoj -- Partitioning signed networks / Vincent Traag, Patrick Doreian, and Andrej Mrvar -- Partitioning multimode networks / Martin G Everett, and Stephen P Borgatti -- Partitioning linked networks / Ales Ziberna -- Bayesian stochastic blockmodeling / Tiago P. Peixoto -- Structured networks and coarsegrained descriptions: a dynamical perspective / Michael T. Schaub, Jean-Charles Delvenne, Renaud Lambiotte, and Mauricio Barahona -- Scientific coauthorship networks / Marjan Cugmas, Anuska Ferligoj, and Luka Kronegger -- Conclusions and directions for future work / Patrick Doreian, Anuska Ferligoj, and Vladimir Batagelj.
Sommario/riassunto	Provides an overview of the developments and advances in the field of network clustering and blockmodeling over the last 10 years This book offers an integrated treatment of network clustering and

blockmodeling, covering all of the newest approaches and methods that have been developed over the last decade. Presented in a comprehensive manner, it offers the foundations for understanding network structures and processes, and features a wide variety of new techniques addressing issues that occur during the partitioning of networks across multiple disciplines such as community detection, blockmodeling of valued networks, role assignment, and stochastic blockmodeling. Written by a team of international experts in the field, Advances in Network Clustering and Blockmodeling offers a plethora of diverse perspectives covering topics such as: bibliometric analyses of the network clustering literature; clustering approaches to networks; label propagation for clustering; and treating missing network data before partitioning. It also examines the partitioning of signed networks, multimode networks, and linked networks. A chapter on structured networks and coarsegrained descriptions is presented, along with another on scientific coauthorship networks. The book finishes with a section covering conclusions and directions for future work. In addition, the editors provide numerous tables, figures, case studies, examples, datasets, and more. Offers a clear and insightful look at the state of the art in network clustering and blockmodeling Provides an excellent mix of mathematical rigor and practical application in a comprehensive manner Presents a suite of new methods, procedures, algorithms for partitioning networks, as well as new techniques for visualizing matrix arrays Features numerous examples throughout, enabling readers to gain a better understanding of research methods and to conduct their own research effectively Written by leading contributors in the field of spatial networks analysis Advances in Network Clustering and Blockmodeling is an ideal book for graduate and undergraduate students taking courses on network analysis or working with networks using real data. It will also benefit researchers and practitioners interested in network analysis.