

Contents

Part I Tutorials

Some Topics in Graph Theory	3
Klavdija Kutnar and Dragan Marušič	

From Graph Theory to Models of Economic Networks. A Tutorial	23
Michael D. König and Stefano Battiston	

Part II Strategic Interaction, Economic Models and Networks

Games of Coalition and Network Formation: A Survey	67
Marco A. Marini	

Network Formation with Closeness Incentives	95
Berno Buechel	

A Dynamic Model of Segregation in Small-World Networks	111
Giorgio Fagiolo, Marco Valente, and Nicolaas J. Vriend	

Interdependent Preferences	127
Ahmad K. Naimzada and Fabio Tramontana	

Co-Evolutive Models for Firms Dynamics	143
Giulia Rotundo and Andrea Scozzari	

Part III Markov Chains and Topology

Betweenness Centrality: Extremal Values and Structural Properties	161
R. Grassi, R. Scapellato, S. Stefani, and A. Torriero	

How to Reduce Unnecessary Noise in Targeted Networks	177
Giacomo Aletti and Diane Saada	

The Dynamic Behaviour of Non-Homogeneous Single-Unireducible Markov and Semi-Markov Chains	195
Guglielmo D'Amico, Jacques Janssen, and Raimondo Manca	
Part IV Applications	
Shareholding Networks and Centrality: An Application to the Italian Financial Market	215
M. D'Errico, R. Grassi, and S. Stefani, and A. Torriero	
Network Dynamics when Selecting Work Team Members	229
Arianna Dal Forno and Ugo Merlone	
Empirical Analysis of the Architecture of the Interbank Market and Credit Market Using Network Theory	241
Giulia De Masi	
Network Measures in Civil Air Transport: A Case Study of Lufthansa ...	257
Aura Reggiani, Sara Signoretti, Peter Nijkamp, and Alessandro Cento	
On Certain Graph Theory Applications	283
Klavdija Kutnar and Dragan Marušič	