Record Nr. UNINA9910815600103321 Large scale structure and dynamics of complex networks : from Titolo information technology to finance and natural science / / editors Guido Caldarelli, Alessandro Vespignani Singapore; ; Hackensack, NJ, : World Scientific, c2007 Pubbl/distr/stampa **ISBN** 1-281-12181-9 9786611121815 981-277-168-9 Edizione [1st ed.] 1 online resource (264 p.) Descrizione fisica Collana Complex systems and interdisciplinary science;; 2 Altri autori (Persone) CaldarelliGuido VespignaniAlessandro <1965-> Disciplina 004.6 Soggetti System analysis Mathematical analysis Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references (p. 235-248) and index. Nota di contenuto Preface: Contents: Introduction: 1 Preliminaries and Basic Definitions in Network Theory: 2 Models of Complex Networks: 3 Correlations in Complex Networks; 4 The Architecture of Complex Weighted Networks: Measurements and Models; 5 Community Structure Identification; 6 Visualizing Large Complex Networks; 7 Modeling the Webgraph: How Far We Are; 8 The Large Scale Structure of the Internet; 9 Spanning Trees in Ecology; 10 Social and Financial Networks; References; Index Sommario/riassunto This book is the culmination of three years of research effort on a multidisciplinary project in which physicists, mathematicians, computer scientists and social scientists worked together to arrive at a unifying picture of complex networks. The contributed chapters form a reference for the various problems in data analysis visualization and modeling of complex networks.