Record Nr. UNINA9910438111703321 Proceedings of the European Conference on Complex Systems 2012 // **Titolo** Thomas Gilbert, Markus Kirkilionis, Gregoire Nicolis, editors Pubbl/distr/stampa Cham, : Springer, 2013 **ISBN** 3-319-00395-X Edizione [1st ed. 2013.] 1 online resource (1030 p.) Descrizione fisica Springer proceedings in complexity Collana Altri autori (Persone) GilbertThomas KirkilionisMarkus <1962-> NicolisG. <1939-> Disciplina 003 Soggetti Computational complexity System theory Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Includes bibliographical references and index. Nota di bibliografia Nota di contenuto Part I. Foundations of Complex Systems -- Part II. Complexity, Information and Computation -- Part III. Prediction, Policy and Planning, Environment -- Part IV. Biological Complexity -- Part V. Interacting Populations, Collective Behavior -- Part VI. Social Systems, Economics and Finance -- Part VII. Contributions to Satellite Meetings -- VII.a. Complexity in Spatial Dynamics -- VII.B. Space-Time Phases --VII.C. Complex Dynamics in Cellular Systems -- VII.D. Information Processing with Recurrent Dynamical Systems: Theory and Experiment -- VII.E. Complexity in the Real World - From Policy Intelligence to Intelligent Policy -- VII.F. Data-Driven Modeling of Contagion Processes -- VII.G. Complex Behavior in Discrete Dynamical Systems -- VII.H. Self-Organization, Management and Control -- VII.I. Complex Multiphase Systems -- VII. Sustainable Energy, Complexity Science and the Smart Grid -- VII.K. Information Processing in Complex Systems --VII.L. Genomic Complexity -- VII.M. Critical Phenomena and Collective Behavior of Multi-Particle Systems -- List of Participants. The European Conference on Complex Systems, held under the Sommario/riassunto patronage of the Complex Systems Society, is an annual event that has become the leading European conference devoted to complexity

science. ECCS'12, its ninth edition, took place in Brussels, during the

first week of September 2012. It gathered about 650 scholars representing a wide range of topics relating to complex systems research, with emphasis on interdisciplinary approaches. More specifically, the following tracks were covered: 1. Foundations of Complex Systems 2. Complexity, Information and Computation 3. Prediction, Policy and Planning, Environment 4. Biological Complexity 5. Interacting Populations, Collective Behavior 6. Social Systems, Economics and Finance This book contains a selection of the contributions presented at the conference and its satellite meetings. Its contents reflect the extent, diversity and richness of research areas in the field, both fundamental and applied.