1. Record Nr. UNINA9910300428603321 Conflict and Complexity: Countering Terrorism, Insurgency, Ethnic and Titolo Regional Violence / / edited by Philip Vos Fellman, Yaneer Bar-Yam, Ali A. Minai New York, NY:,: Springer New York:,: Imprint: Springer,, 2015 Pubbl/distr/stampa **ISBN** 1-4939-1705-6 Edizione [1st ed. 2015.] Descrizione fisica 1 online resource (X, 292 p. 68 illus., 57 illus. in color.) Understanding Complex Systems, , 1860-0832 Collana Disciplina 363.325015118 Soggetti terrorism regional security ethnic conflict simulation **Physics** Social sciences Computational complexity Application software System safety Applications of Graph Theory and Complex Networks Methodology of the Social Sciences Complexity Computer Appl. in Social and Behavioral Sciences Security Science and Technology Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia "This volume is part of the NECSI Studies on Complexity collection."--Note generali Title page verso. Nota di bibliografia Includes bibliographical references. Nota di contenuto Preface -- Part I: The Theoretical Background -- Modeling Terrorist Networks: The Second Decade -- Complex Systems Studies and Terrorism -- The Psychology of Terrorism -- A Framework for Agentbased Social Simulations of Social Identity Dynamics -- DIME/PMESII Models -- Net-Centric Logistics: Complex systems science aims at moving targets -- Part II: Applications and Case Studies -- A Fractal

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Sommario/riassunto

Complexity science affords a number of novel tools for examining terrorism, particularly network analysis and NK-Boolean fitness landscapes as well as other tools drawn from non-linear dynamical systems modeling. This book follows the methodologies of complex adaptive systems research in their application to addressing the problems of terrorism, specifically terrorist networks, their structure and various methods of mapping and interdicting them as well as exploring the complex landscape of network-centric and irregular warfare. A variety of new models and approaches are presented here, including Dynamic Network Analysis, DIME/PMESII models, percolation models and emergent models of insurgency. In addition, the analysis is informed by practical experience, with analytical and policy guidance from authors who have served within the U.S. Department of Defense, the British Ministry of Defence as well as those who have served in a civilian capacity as advisors on terrorism and counter-terrorism.