Record Nr. UNINA9910300131203321 Dynamics of Disasters: Algorithmic Approaches and Applications // Titolo edited by Ilias S. Kotsireas, Anna Nagurney, Panos M. Pardalos Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2018 **ISBN** 3-319-97442-4 Edizione [1st ed. 2018.] 1 online resource (210 pages) Descrizione fisica Collana Springer Optimization and Its Applications, , 1931-6836; ; 140 Disciplina 658.477 Soggetti Mathematical optimization Calculus of variations Mathematical models Operations research Emergency medical services Game theory Dynamical systems Calculus of Variations and Optimization Mathematical Modeling and Industrial Mathematics Operations Research and Decision Theory **Emergency Services** Game Theory **Dynamical Systems** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Evacuation trees with contraow and divergence considerations --Nota di contenuto Modelling possible oil spills in the Barents Sea and their consequences -- Prospects and Bottlenecks of Reciprocal Partnerships between the Private and Humanitarian: Sectors in Cash Transfer Programming for Humanitarian Response -- Advances in Disaster Communications: Broadband Systems for First Responders -- Equilibrium Analysis for Common-Pool Resources -- A Multitiered Supply Chain Network

Equilibrium Model for Disaster Relief with Capacitated Freight Service

Provision -- A Variational Equilibrium Network Framework for

## Sommario/riassunto

Humanitarian Organizations in Disaster Relief: Effective Product Delivery Under Competition for Financial Funds -- A humanitarian logistics case study for the intermediary phase accommodation center for refugees and other humanitarian disaster victims.

This book surveys new algorithmic approaches and applications to natural and man-made disasters such as oil spills, hurricanes, earthquakes and wildfires. Based on the "Third International Conference on Dynamics of Disasters" held in Kalamata, Greece, July 2017, this Work includes contributions in evacuation logistics, disaster communications between first responders, disaster relief, and a case study on humanitarian logistics. Multi-disciplinary theories, tools, techniques and methodologies are linked with disasters from mitigation and preparedness to response and recovery. The interdisciplinary approach to problems in economics, optimization, government, management, business, humanities, engineering, medicine, mathematics, computer science, behavioral studies, emergency services, and environmental studies will engage readers from a wide variety of fields and backgrounds.