Record Nr. UNINA9910799275503321 Autore Fantoni Stefano **Titolo** Quantitative Sustainability: Interdisciplinary Research for Sustainable Development Goals / / edited by Stefano Fantoni, Nicola Casagli, Cosimo Solidoro, Marina Cobal Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2024 3-031-39311-2 **ISBN** Edizione [1st ed. 2024.] Descrizione fisica 1 online resource (198 pages) Altri autori (Persone) CasagliNicola SolidoroCosimo CobalMarina Disciplina 530.1 Soggetti System theory Sustainability Artificial intelligence - Data processing Bioclimatology Food security Energy policy Energy and state **Complex Systems** Data Science Climate Change Ecology **Food Security** Energy Policy, Economics and Management Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Preface.-Forward.-Laboratory structure -- The blue planet and the ocean sustainable economy -- Food security and the health of the planet and its inhabitants -- Climate and environmental changes --The new data science for sustainability and huiman ecology -- Energy transition and indiustrial product chains -- Sustainability frames and social equity and the right to sustainability -- Protection of the Earth

habitats with Space tools.

Sommario/riassunto

This open access book focuses on how scientific methodologies can help industrial managers, entrepreneurs and policymakers handle the 17 Sustainable Development Goals in an efficient and realistic way. It also offers an operative scheme for scientists to overcome their discipline barriers. Is interdisciplinarity an intrinsic research value or is it merely instrumental for handling the increasing flux of open problems that sustainability poses to science? Can these problems of sustainability be solved with what the authors already know? Is it iust a matter of having the right people at the table and giving them sufficient resources, or is it something more? Is meeting the needs of the present without compromising those of future generations a scientific definition of sustainable development? Questions similar to those posed in the sixties regarding complexity must be asked about sustainability today. In addition, the new data science includes powerful tools for making novel quantitative predictions about future sustainability indicators, an open problem that the book discusses. This book is primarily addressed to Ph.D. students, postdocs and senior researchers in the Life and Hard Science (LHS) and Social Sciences and Humanities (SSH) disciplines, as well as professionals of the primary, secondary and tertiary industrial sectors.