Record Nr. UNINA9910624311503321 Titolo Transdisciplinarity / / edited by Nima Rezaei Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2022 **ISBN** 9783030946517 9783030946500 Edizione [1st ed. 2022.] Descrizione fisica 1 online resource (737 pages) Collana Integrated Science, , 2662-947X;; 5 Disciplina 001.4 Soggetti Medicine—Research Biology—Research Art—Study and teaching Biomedical engineering Philosophy Economic sociology Biomedical Research Creativity and Arts Education Biomedical Engineering and Bioengineering **Economic Sociology** Interdisciplinarietat Investigació Llibres electrònics Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Includes bibliographical references and index. Nota di bibliografia Nota di contenuto 1 Introduction on Integrated Science: Transdisciplinary across the Different Disciplines -- 2 Chaos Theoretical Explanation to Each Development of Evolution Theory, Psychology, Physics, and Philosophy -- 3 Managerial Problems and Cultural Heritage in Information Technology -- 4 On the Essential Unity of Mathematics, Science, and Art: The Justice Evaluation Function and the Golden Number -- 5 Integration of Film Theory and Studies with Neuroscience -- 6 Systems View in Engineering Research -- 7 Molecular Dynamics Simulations:

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Sommario/riassunto

This contributed volume book aims at discussing transdisciplinary approaches to address common problems. By working transdisciplinarily, researchers coming from different disciplines can work jointly using a shared conceptual framework bringing together disciplinary-specific theories and concepts. There are numerous barriers that can obstruct effective communication between different cultures, communities, religions and geographies. This book shows that through bringing together different disciplines, researchers not only can surpass these barriers but can effectively produce new venues of thought that can positively affect the development and evolution of research and education. The book discusses new and emerging applications of knowledge produced by transdisciplinary efforts and covers the interplay of many disciplines, including agriculture. economics, mathematics, engineering, industry, information technology, marketing, nanoscience, neuroscience, space exploration, human-animal relationships, among others. Consequently, it also covers the relationship between art and science, as one of the most remarkable transdisciplinary approaches that paves the way for new methods in engineering, design, architecture and many other fields. .