Record Nr. UNINA9910484285803321 Mathematical Topics on Representations of Ordered Structures and **Titolo** Utility Theory: Essays in Honor of Professor Ghanshyam B. Mehta // edited by Gianni Bosi, María J. Campión, Juan C. Candeal, Esteban Indurain Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2020 **ISBN** 3-030-34226-3 Edizione [1st ed. 2020.] Descrizione fisica 1 online resource (xxii, 368 pages) Collana Studies in Systems, Decision and Control, , 2198-4182;; 263 Disciplina 006.3 Soggetti Computational intelligence Finance—Mathematics Operations research **Decision making** Algebra Ordered algebraic structures Computational Intelligence **Financial Mathematics** Operations Research/Decision Theory Order, Lattices, Ordered Algebraic Structures Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Topology and preference relations -- The existence and the non-Nota di contenuto existence of utility functions -- Open questions in Utility Theory --Representations of interval orders on connected separable -- Searching for a Debreu's open gap lemma for semiorders -- A note on Candeal and Indurain's semiorder separability -- Chain Representations of Nested Families of Biorders -- A note on representable group topologies -- Preferences in abstract convex structures -- Strictly monotonic preferences -- Continuity and continuous multi-utility representations -- Jointly continuous multy-utility representation --Subjective States without the Completeness Axiom -- Preference for

Flexibility: A Continuous Representation -- The Arrow-Hahn

## Sommario/riassunto

Construction in a locally compact -- Continuous Utility Representation of Fuzzy Preferences -- Similarity relation by using money-metric utility functions -- The interplay between intergenerational justice -- Comparative Risk Aversion for State-Dependent Preferences.

This book offers an essential review of central theories, current research and applications in the field of numerical representations of ordered structures. It is intended as a tribute to Professor Ghanshyam B. Mehta, one of the leading specialists on the numerical representability of ordered structures, and covers related applications to utility theory, mathematical economics, social choice theory and decision-making. Taken together, the carefully selected contributions provide readers with an authoritative review of this research field, as well as the knowledge they need to apply the theories and methods in their own work.