Record Nr. UNINA9910255009503321 Autore Xu Jiuping Titolo Random-Like Bi-level Decision Making / / by Jiuping Xu, Zongmin Li, Zhimiao Tao Singapore:,: Springer Nature Singapore:,: Imprint: Springer,, 2016 Pubbl/distr/stampa **ISBN** 981-10-1768-9 Edizione [1st ed. 2016.] Descrizione fisica 1 online resource (411 p.) Collana Lecture Notes in Economics and Mathematical Systems, , 2196-9957;; 688 004 Disciplina Soggetti Computer science - Mathematics **Probabilities** Mathematical statistics - Data processing Algorithms Mathematics Computer programming Mathematics of Computing **Probability Theory** Statistics and Computing **Applications of Mathematics** Programming Techniques Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Includes index. 1: Foundations of Random-like Bi-level Decision Making -- 2: Bi-level Nota di contenuto Decision Making in Random Phenomenon -- 3: Bi-level Decision Making in Ra-Ra Phenomenon -- 4: Bi-level Decision Making in Ra-Fu Phenomenon -- 5: Methodology From an Equilibria Viewpoints --Appendix: MATLAB Codes -- Index. Sommario/riassunto Among the various multi-level formulations of mathematical models in decision making processes, this book focuses on the bi-level model. Being the most frequently used, the bi-level model addresses conflicts which exist in multi-level decision making processes. From the

> perspective of bi-level structure and uncertainty, this book takes reallife problems as the background, focuses on the so-called random-like

uncertainty, and develops the general framework of random-like bilevel decision making problems. The random-like uncertainty considered in this book includes random phenomenon, random-overlapped random (Ra-Ra) phenomenon and fuzzy-overlapped random (Ra-Fu) phenomenon. Basic theory, models, algorithms and practical applications for different types of random-like bi-level decision making problems are also presented in this book.