Record Nr. UNISA996466742303316 Autore **Barrett Ross** Titolo Don't be afraid of physics: quantum mechanics, relativity and cosmology for everyone / / Ross Barrett, Pier Paolo Delsanto Pubbl/distr/stampa Cham, Switzerland: ,: Springer, , [2021] ©2021 **ISBN** 3-030-63409-4 Edizione [1st ed. 2021.] Descrizione fisica 1 online resource (XVIII, 293 p. 79 illus., 48 illus. in color.) Disciplina 530 **Physics** Soggetti Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Part I: What is science all about? -- The Ultimate Question -- The Nota di contenuto Meaning of Understanding -- Truth and Beauty -- Gödel, Hawking and the Foundations of Physics -- Part II: Today's Frontiers -- The Incredible Quantum Mechanics -- Special Relativity -- General Relativity -- The Most Accurate Theory in Physics -- The Standard Model of Fundamental Particles -- How the World Began -- Modern Cosmology -- Part III: Open Questions -- Issues for the Future --Appendices. . Sommario/riassunto With the aid of entertaining short stories, anecdotes, lucid explanations and straight-forward figures, this book challenges the perception that the world of physics is inaccessible to the non-expert. Beginning with Neanderthal man, it traces the evolution of human reason and understanding from paradoxes and optical illusions to gravitational waves, black holes and dark energy. On the way, it provides insights into the mind-boggling advances at the frontiers of physics and cosmology. Unsolved problems and contradictions are highlighted, and contentious issues in modern physics are discussed in a non-dogmatic way in a language comprehensible to the non-scientist. It has something for everyone.