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Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Fundamental Physics with Black Holes (Xavier Calmet) -- Black holes and thermodynamics - The first half century (Daniel Grumiller, Robert McNees and Jakob Salzer) -- The Firewall Phenomenon (R. B. Mann) -- Monsters, Black holes and Entropy (Stephen D. H. Hsu) -- Primordial Black Holes: sirens of the early Universe (Anne M. Green) -- Self-gravitating Bose-Einstein condensates (Pierre-Henri Chavanis) -- Quantum Amplitudes in Black-Hole Evaporation with Local Supersymmetry (P.D.D'Eath and A.N.St.J.Farley) -- Hawking radiation from higher-dimensional black holes (Panagiota Kanti and Elizabeth Winstanley) -- Black Holes at the Large Hadron Collider (Greg Landsberg) -- Minimum length effects in black hole physics (Roberto

Casadio, Octavian Micu, Piero Nicolini).

Sommario/riassunto

Beginning with an overview of the theory of black holes by the editor, this book presents a collection of ten chapters by leading physicists dealing with the variety of quantum mechanical and quantum gravitational effects pertinent to black holes. The contributions address topics such as Hawking radiation, the thermodynamics of black holes, the information paradox and firewalls, Monsters, primordial black holes, self-gravitating Bose-Einstein condensates, the formation of small black holes in high energetic collisions of particles, minimal length effects in black holes and small black holes at the Large Hadron Collider. Viewed as a whole the collection provides stimulating reading for researchers and graduate students seeking a summary of the quantum features of black holes.