Record Nr. UNINA9910451143803321 The structural foundations of quantum gravity [[electronic resource] /] / **Titolo** edited by Dean Rickles, Steven French, and Juha Saatsi Pubbl/distr/stampa Oxford, : Clarendon New York,: Oxford University Press, 2006 **ISBN** 1-280-75769-8 0-19-151502-7 1-4294-6511-5 Descrizione fisica 1 online resource (283 p.) Altri autori (Persone) RicklesDean FrenchSteven SaatsiJuha Disciplina 530.143 Soggetti Quantum gravity **Physics** Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Contents; Notes on Contributors; 1. Quantum Gravity Meets Structuralism: Interweaving Relations in the Foundations of Physics; 2. Structural Realism and Quantum Gravity; 3. Structure, Individuality, and Quantum Gravity; 4. Points, Particles, and Structural Realism; 5. Holism and Structuralism in Classical and Quantum General Relativity; 6. Time and Structure in Canonical Gravity; 7. The Case for Background Independence; 8. Quantum Quandaries: A Category-Theoretic Perspective; Index What is spacetime? General relativity and quantum field theory answer Sommario/riassunto this question in very different ways. This collection of essays by physicists and philosophers looks at the problem of uniting these two most fundamental theories of our world, focusing on the nature of space and time within this new quantum framework, and the kind of

metaphysical picture suggested by recent developments in physics and

reflection. on recent advances in modern physics. -; Quantum gravity is

mathematics. This is a book that will inspire further philosophical

the name given to a theory that unites general relat