

1. Record Nr.	UNINA9910458171103321
Titolo	Recent progress in many-body theories [[electronic resource]] : proceedings of the 12th International Conference / / editors, Joseph A. Carlson, Gerardo Ortiz
Pubbl/distr/stampa	Singapore ; ; Hackensack, N.J., : World Scientific, c2006
ISBN	1-281-92450-4 9786611924508 981-277-289-8
Descrizione fisica	1 online resource (284 p.)
Collana	Series on advances in quantum many-body theory ; ; v. 9
Altri autori (Persone)	CarlsonJoseph A OrtizGerardo
Disciplina	530.14/4
Soggetti	Many-body problem Mechanics, Analytic Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	CONTENTS ; Introduction ; Preface ; International Advisory Committee ; Feenberg Medal Session ; Surface and Superconductivity ; Spartak T. Belyaev - Recipient of the Feenberg Medal ; Many-Body Physics and Spontaneous Symmetry Breaking ; Keynote Speaker ; The Future Lies Ahead Strongly Correlated Systems and Phase Transitions Exact Results for Many-Body Problems Using Few-Body Methods ; Quantum Matters: Physics Beyond Landau's Paradigms ; Microscopic Calculations of Quantum Phase Transitions in Frustrated Magnetic Lattices Recent Applications of the DMRG Method Functional Renormalization Group in the 2D Hubbard Model ; Quantum Phase Transitions and Event Horizons: Condensed Matter Analogies ; Spin- Charge Separation and Topological Phase Transitions in Aharonov- Bohm Rings of Interacting Electrons

Quantum Fluids and Solids

Excitations in ^3He

Quantum Films: A Quantum Simulation Study

; Can Incommensuration Stabilize a Superfluid Phase of Para-Hydrogen?

; Analysis of the Interatomic Potential of the Helium Systems

; Nuclear Physics and QCD

Quantum Phase Transitions in Mesoscopic Systems

Nuclear-Structure Theory in the Search for New Fundamental Physics

; Matter at Extreme Density and its Role in Neutron Stars and Supernova

; New Approaches to Strong Coupling Lattice QCD

; Nuclear Interactions from the Renormalization Group

Random Interactions and Ground State Spin of Finite Fermi Systems

Sommario/riassunto

Quantum many-body theory has greatly expanded its scope and depth over the past few years, treating more deeply long-standing issues like phase transitions and strongly-correlated systems, and simultaneously expanding into new areas such as cold atom physics and quantum information. This collection of contributions highlights recent advances in all these areas by leaders in their respective fields. Also included are some historic perspectives by L P Gor'kov and S T Belyaev, Feenberg Medal Recipients at this conference, and Nobel Laureate P W Anderson gives his unique outlook on the future of
