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potentials4.2. Mott transition of EPs and indirect excitons in a periodic potential; 5. Accelerated Optimization Problem Search Using BECs; 5.1. The bosonic Ising model; 5.2. Performance of the bosonic Ising model; 6. Summary and Conclusions; Acknowledgments; References; Quantum Simulation Using Ultracold Atoms in Optical Lattices S. Sugawa, S. Taie, R. Yamazaki and Y. Takahashi; 1. Introduction; 1.1. Quantum simulation of Hubbard model; 1.2. Why quantum simulation?; 1.3. Extending the system; 2. An approach using ytterbium 3. Production of quantum degenerate Yb atoms4. Superfluid-Mott insulator transition; 5. Strongly-correlated phases in Bose-Fermi mixtures; 5.1. Hamiltonian of the system; 5.2. Repulsively interacting Bose-Fermi system; 5.3. Attractively interacting Bose-Fermi system; 5.4. Thermodynamics; 6. Prospect; Acknowledgement; References; Universality of Integrable Model: Baxter's T-Q Equation, $SU(N)/SU(2)N-3$ Correspondence and -Deformed Seiberg- Witten Prepotential T.-S. Tai; 1. Introduction and summary; 2. XXX spin chain; 2.1. Baxter's T-Q equation; 2.2. More detail; 3. XXX Gaudin model 3.1. RHS of Fig. 33.2. LHS of Fig. 3; 3.2.1. Free-field representation; 4. Application and discussion; 4.1. Discussion; 4.2. XYZ Gaudin model; Acknowledgments; Appendix A; Definition of w_n ; References; Exact Analysis of Correlation Functions of the XXZ Chain T. Deguchi, K. Motegi and J. Sato; 1. Introduction; 2. Spin-1/2 XXZ chain; 3. Algebraic Bethe ansatz; 4. Steps to calculate correlation functions; 5. Integrable higher spin XXZ chain; 6. Conclusion; Acknowledgments; Appendix A: Evaluation of (42); References; Classical Analogue of Weak Value in Stochastic Process H. Tomita 1. Introduction

Sommario/riassunto

This book is a collection of contributions to the Symposium on Interface between Quantum Information and Statistical Physics held at Kinki University in November 2011. Subjects of the symposium include quantum adiabatic computing, quantum simulator using bosons, classical statistical physics, among others. Contributions to this book are prepared in a self-contained manner so that a reader with a modest background may understand the subjects.

2. Record Nr.	UNINA9910889864903321
Titolo	Per l'orticoltura del Lazio : la concimazione degli ortaggi / a cura di D. Guzzini e E. Gherardi
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