

1. Record Nr.	UNISA996601665603316
Autore	Nagao Kazuma
Titolo	Fluctuations and Non-Equilibrium Phenomena in Strongly-Correlated Ultracold Atoms // by Kazuma Nagao
Pubbl/distr/stampa	Springer Singapore, 2020 Singapore : , : Springer Singapore : , : Imprint : Springer, , 2020
ISBN	981-15-7171-6
Edizione	[1st ed. 2020.]
Descrizione fisica	1 online resource (126 pages)
Collana	Springer Theses, Recognizing Outstanding Ph.D. Research, , 2190-5053
Disciplina	530.43078
Soggetti	Phase transformations (Statistical physics) Condensed materials Superconductivity Superconductors Phase transitions (Statistical physics) Statistical physics Quantum Gases and Condensates Strongly Correlated Systems, Superconductivity Phase Transitions and Multiphase Systems Statistical Physics and Dynamical Systems
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Introduction -- Ultracold Bose Gases in Optical Lattices -- Phase Space Methods for Quantum Dynamics -- Response of the Higgs Mode in a Three Dimensional Optical Lattice -- Semiclassical Quench Dynamics of Bose Gases in Optical Lattices -- Conclusions and Outlooks -- Appendix.
Sommario/riassunto	This book discusses non-equilibrium quantum many-body dynamics, recently explored in an analog quantum simulator of strongly correlated ultracold atoms. The first part presents a field-theoretical analysis of the experimental observability of the Higgs amplitude mode that emerges as a relativistic collective excitation near a quantum phase transition of superfluid Bose gases in an optical lattice potential.

The author presents the dynamical susceptibilities to external driving of the microscopic parameters, taking into account a leading-order perturbative correction from quantum and thermal fluctuations and shows clear signatures of the Higgs mode in these observables. This is the first result that strongly supports the stability of the Higgs mode in three-dimensional optical lattices even in the presence of a spatially inhomogeneous confinement potential and paves the way for desktop observations of the Higgs mode. In the second part, the author applies the semi-classical truncated-Wigner approximation (TWA) to far-from-equilibrium quantum dynamics. Specifically, he considers the recent experiments on quantum-quench dynamics in a Bose-Hubbard quantum simulator. A direct comparison shows remarkable agreement between the numerical results from TWA and the experimental data. This result clearly indicates the potential of such a semi-classical approach in reliably simulating many-body systems using classical computers. The book also includes several chapters providing comprehensive reviews of the recent studies on cold-atomic quantum simulation and various theoretical methods, including the Schwinger-boson approach in strongly correlated systems and the phase-space semi-classical method for far-from-equilibrium quantum dynamics. These chapters are highly recommended to students and young researchers who are interested in semi-classical approaches in non-equilibrium quantum dynamics.

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2. Record Nr.	UNINA9910952251903321
Autore	Nystrom Bradley P
Titolo	Song of Eros : Ancient Greek Love Poems
Pubbl/distr/stampa	Carbondale, IL, USA, : Southern Illinois University Press, 20090301 Southern Illinois University Press
ISBN	1-282-13904-5 9786613808332 0-8093-8684-4
Edizione	[1st ed.]
Descrizione fisica	1 online resource (128 p.)
Disciplina	881/.0108354
Soggetti	POETRY General Love poetry, Greek - Translations into English Greek & Latin Languages & Literatures Languages & Literatures
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di contenuto	Cover -- Book Title -- Copyright Page -- Contents -- Preface -- The Poems -- The Poets -- Index to the Greek Texts -- Author Bio -- Back Cover.
Sommario/riassunto	This collection of new translations of eighty poems provides a pleasant, thought-provoking reminder of love's vagaries as captured through the wit, charm, and insight of the master poets of antiquity. All the emotions and experiences associated with love rejection, infatuation, ecstasy, desperation, loneliness are rendered accessible to contemporary readers through this lively, modern, yet faithful English translation of works that date from the seventh century B.C. to the sixth century A.D. Illustrations accompany the poetry of Plato, Sappho, Stratto, Meleagros, and others, capturing both the flavor of the age and the theme of the texts. "