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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Development of the formalism -- Fermions and the Fermi surface -- Hubbard-Stratonovich transformations -- Bosonization of the Hamiltonian and the density-density correlation function -- The single-particle Green's function -- Applications to physical systems -- Singular interactions (f q ? q ??) -- Quasi-one-dimensional metals -- Electron-phonon interactions -- Fermions in a stochastic medium -- Transverse gauge fields.
Sommario/riassunto	The author presents in detail a new non-perturbative approach to the fermionic many-body problem, improving the bosonization technique and generalizing it to dimensions $d > 1$ via functional integration and Hubbard--Stratonovich transformations. In Part I he clearly illustrates the approximations and limitations inherent in higher-dimensional bosonization and derives the precise relation with diagrammatic perturbation theory. He shows how the non-linear terms in the energy dispersion can be systematically included into bosonization in arbitrary d , so that in $d > 1$ the curvature of the Fermi surface can be taken into account. Part II gives applications to problems of physical interest, such as coupled metallic chains, electron-phonon interactions, disordered electrons, and electrons coupled to transverse gauge fields. The book addresses researchers and graduate students in theoretical condensed

matter physics.
