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Nota di contenuto	The holographic correspondence -- Zero density matter -- Quantum critical transport -- Compressible quantum matter -- Metallic transport without quasiparticles -- Symmetry broken phases -- Further topics -- Connections to experiments.
Sommario/riassunto	"Holographic Quantum Matter describes a new field that has emerged in the past decade at the interface of condensed matter physics and quantum gravity. Experimental discoveries in condensed matter have led to the identification of numerous materials--like high temperature superconductors (HTS)--in which the collective motion of electrons requires deeper understand of quantum effects at large length scales. HTS's act as a "strange metal" in which the charge and energy is not carried by quasiparticles. In the meantime, studies of quantum gravity using string theory led to a major breakthrough with the identification of a mathematical tool known as the holographic correspondence. The authors describe the developments that followed with the realization that states of quantum matter without quasiparticle excitations are precisely those that are efficiently described by the holographic correspondence. The book is addressed to graduate students in theoretical physics, especially those specializing in condensed matter,

string theory, or quantum field theory. It presents the necessary background in the study of quantum matter and in string theory, so that students in both fields are apprised of recent developments in the other field. It connects this introductory discussion to what are the most important recent developments. It provides the tools and motivation for performing holographic computations. And it explains how the salient technical results from holographic studies have led to new insights into quantum matter"--