1. Record Nr. UNINA9910254576003321

Autore	Amoretti Andrea
Titolo	Condensed Matter Applications of AdS/CFT : Focusing on Strange Metals / / by Andrea Amoretti
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2017
ISBN	3-319-61875-X
Edizione	[1st ed. 2017.]
Descrizione fisica	1 online resource (199 pages) : illustrations
Collana	Springer Theses, Recognizing Outstanding Ph.D. Research, , 2190-5053
Disciplina	530.41
Soggetti	Superconductivity Superconductors Physics Strongly Correlated Systems, Superconductivity Mathematical Methods in Physics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Part I: Condensed Matter Background -- Preamble: Transport Coefcients Denition -- Standard Metals and the Fermi Liquid -- The Fermi Liquid Breakdown: High-Tc Superconductivity -- Theoretical Attempts -- Part II: Introduction to Holography -- The Gauge Gravity Duality -- Part III: Thermo-electric Transport in AdS/CFT -- Preamble: Linear Response Theory -- The Simple Raissner-Nordstrom Case -- Momentum Dissipation in Holography -- Physical Implications.
Sommario/riassunto	The book deals with applications of the AdS/CFT correspondence to strongly coupled condensed matter systems. In particular, it concerns with the study of thermo-electric transport properties of holographic models exhibiting momentum dissipation and their possible applications to the transport properties of strange metals. The present volume constitutes one of the few examples in the literature in which the topic is carefully reviewed both from the experimental and theoretical point of view, including not only holographic results but also standard condensed matter achievements developed in the past decades. This work might be extremely useful both for scientific and pedagogical purposes.