1. Record Nr. UNICAMPANIAVAN00102822

Autore	Cakoni, Fioralba
Titolo	A qualitative approach to inverse scattering theory / Fioralba Cakoni, David Colton
Pubbl/distr/stampa	New York, : Springer, 2014
Titolo uniforme	A qualitative approach to inverse scattering theory
Descrizione fisica	X, 297 p. : ill. ; 24 cm
Altri autori (Persone)	Colton, David L.
Soggetti	35P25 - Scattering theory for PDEs [MSC 2020] 35R25 - Ill-posed problems for PDEs [MSC 2020] 35R30 - Inverse problems for PDEs [MSC 2020] 65M30 - Numerical methods for ill-posed problems for initial value and initial-boundary value problems involving PDEs [MSC 2020] 65R30 - Numerical methods for ill-posed problems for integral equations [MSC 2020] 78A45 - Diffraction, scattering [MSC 2020]
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia

2. Record Nr. UNINA9910556886803321

Autore	Denicol Gabriel S.
Titolo	Microscopic Foundations of Relativistic Fluid Dynamics / / by Gabriel S. Denicol, Dirk H. Rischke
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2021
ISBN	3-030-82077-7
Edizione	[1st ed. 2021.]
Descrizione fisica	1 online resource (306 pages)
Collana	Lecture Notes in Physics, , 1616-6361 ; ; 990
Disciplina	532.05
Soggetti	Nuclear physics Mathematical physics Physics Astrophysics Nuclear Physics Mathematical Methods in Physics Classical and Continuum Physics Theoretical, Mathematical and Computational Physics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Relativistic Fluid Dynamics -- Linear Stability and Causality -- Analytical Solutions and Transient Dynamics -- Microscopic Origin of Transport Coeffcients: Linear-Response Theory -- Fluid Dynamics from Kinetic Theory: Traditional Approaches -- Method of Moments: Equilibrium Reference State -- Method of Moments: Convergence Properties -- Fluid Dynamics from the Method of Moments -- Method of Moments: Anisotropic Reference State.
Sommario/riassunto	This book provides an introduction to relativistic dissipative fluid dynamics, with particular emphasis on its derivation from microscopic transport theory. After a phenomenological derivation of relativistic dissipative fluid dynamics from the second law of thermodynamics, the intrinsic instabilities of relativistic Navier-Stokes theory are discussed. In turn, analytical solutions of relativistic dissipative fluid dynamics are presented. Following, the authors discuss several theories and approaches to derive transport coefficients in dissipative fluid dynamics

such as the Chapman-Enskog theory, the theory of Israel and Stewart, and a more recent derivation of relativistic dissipative fluid dynamics based on kinetic theory, which constitutes the main focus of the second part of this book. This book is intended for advanced graduate students and researchers in physics and requires basic knowledge of the theory of special and general relativity. It should be of particularinterest to researchers that apply relativistic fluid dynamics in cosmology, astrophysics, and high-energy nuclear physics.