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Nota di contenuto	CONTENTS ; Preface ; Thermodynamics and In-Medium Hadron Properties from Lattice QCD ; 1 Introduction ; 1.1 QCD thermodynamics ; 1.2 Lattice formulation of QCD thermodynamics ; 2 The QCD Phase Diagram ; 3 The Transition Temperature ; 4 Equation of State 5 Heavy Quark Free Energies 5.1 Deconfinement order parameter ; 5.2 Heavy quark potential ; 6 Thermal Modifications of Hadron Properties ; 6.1 QCD phase transition and the hadron spectrum ; 6.2 Spatial and temporal correlation functions hadronic susceptibilities 6.3 Spectral functions from hadronic correlation functions 6.4 Spectral analysis of thermal correlation functions ; 6.5 Vector meson spectral function and thermal dilepton rates

; 6.6 Heavy quark spectral functions and charmonium suppression
 ; 7 Summary ; References ; Appendix A
 Thermodynamics of the High-Temperature Quark-Gluon Plasma
 1 Introduction ; 2 The Scalar Field Theory as a Pedagogical
 Example ; 2.1 Perturbation theory
 and its difficulties ; 2.2 Order g^3 from
 various resummation schemes ; 2.3
 Self-consistent resummation ; 3 Quark-Gluon
 Plasma
 3.1 Perturbative results 3.2 Lattice results
 ; 3.3 Dimensional reduction ; 4 Thermodynamics of
 HTL Quasiparticles in QCD ; 4.1 HTL-
 screened perturbation theory ; 4.2 2PI
 formalism in gauge theories ; 4.3
 Approximately self-consistent entropy and quark density
 ; 4.4 Pressure
 4.5 Quark number susceptibilities

Sommario/riassunto

This is a review monograph on quark-gluon plasma (QGP). Different theoretical and experimental aspects of the program to produce QGP in relativistic heavy-ion collisions are covered by experts in the field. This is the third volume in a series on the subject, and the first such monograph to focus on the implications of the experimental results from RHIC, the relativistic heavy-ion collider at the National Brookhaven Laboratory. The review articles will be useful to experienced researchers as well as to graduate students entering the field.

Contents: Thermodynamics and In-Me