Título:

Autor:

Editorial:

Tema:

Sinopsis

Precio: $860.91

Año: 2009

Edición: 1ª

ISBN: 9780821846599

The thermodynamical formalism has been developed by the authors for a very general class of transcendental meromorphic functions. A function f:\mathbb{C}\to\hat{{\mathbb C}} of this class is called dynamically (semi-) regular. The key point in the authors' earlier paper (2008) was that one worked with a well chosen Riemannian metric space (\hat{{\mathbb C}} , \sigma) and that the Nevanlinna theory was employed.

In the present manuscript the authors first improve upon their earlier paper in providing a systematic account of the thermodynamical formalism for such a meromorphic function f and all potentials that are Hölder perturbations of -t\log|f'|_\sigma. In this general setting, they prove the variational principle, they show the existence and uniqueness of Gibbs states (with the definition appropriately adapted for the transcendental case) and equilibrium states of such potentials, and they demonstrate that they coincide. There is also given a detailed description of spectral and asymptotic properties (spectral gap, Ionescu-Tulcea and Marinescu Inequality) of Perron-Frobenius operators, and their stochastic consequences such as the Central Limit Theorem, K-mixing, and exponential decay of correlations.

Table of Contents

Index