

Librería  
**Bonilla y Asociados**  
desde 1950



**Título:**

**Autor:**

**Precio:** \$1250.20

**Editorial:**

**Año:** 2013

**Tema:**

**Edición:** 1ª

**Sinopsis**

**ISBN:** 9780821889763

The authors define a Banach space  $M^1$  of models for fermions or quantum spins in the lattice with long range interactions and make explicit the structure of (generalized) equilibrium states for any  $m \in M^1$ . In particular, the authors give a first answer to an old open problem in mathematical physics--first addressed by Ginibre in 1968 within a different context--about the validity of the so-called Bogoliubov approximation on the level of states. Depending on the model  $m \in M^1$ , the authors' method provides a systematic way to study all its correlation functions at equilibrium and can thus be used to analyze the physics of long range interactions. Furthermore, the authors show that the thermodynamics of long range models  $m \in M^1$  is governed by the non-cooperative equilibria of a zero-sum game, called here thermodynamic game.

Table of Contents

Part 1. Main Results and Discussions |Fermi systems on lattices

|Fermi systems with long-range interactions

Part 2. Complementary Results |Periodic boundary conditions and Gibbs equilibrium states

|The set  $E^1$  of  $l^1$ -invariant states

|Permutation invariant Fermi systems

|Analysis of the pressure via t.i. states

|Purely attractive long-range Fermi systems

|The max-min and min-max variational problems

|Bogoliubov approximation and effective theories

|Appendix

|Bibliography

|Index of notation

|Index