



Algebraic Analysis of Solvable Lattice Models: Regional Conference (Paperback)

By Michio Jimbo, Tetsuji Miwa

American Mathematical Society, United States, 1995. Paperback. Condition: New. Language: English . Brand New Book. Based on the NSF-CBMS Regional Conference lectures presented by Miwa in June 1993, this book surveys recent developments in the interplay between solvable lattice models in statistical mechanics and representation theory of quantum affine algebras. Because results in this subject were scattered in the literature, this book fills the need for a systematic account, focusing attention on fundamentals without assuming prior knowledge about lattice models or representation theory. After a brief account of basic principles in statistical mechanics, the authors discuss the standard subjects concerning solvable lattice models in statistical mechanics, the main examples being the spin $1/2$ XXZ chain and the six-vertex model. The book goes on to introduce the main objects of study, the corner transfer matrices and the vertex operators, and discusses some of their aspects from the viewpoint of physics. Once the physical motivations are in place, the authors return to the mathematics, covering the Frenkel-Jing bosonization of a certain module, formulas for the vertex operators using bosons, the role of representation theory, and correlation functions and form factors. The limit of the $SXXS$ model is briefly discussed, and the book closes...



[READ ONLINE](#)
[1.94 MB]

Reviews

A brand new eBook with a brand new standpoint. It can be rally fascinating throug reading through time. I am happy to let you know that this is the greatest ebook i have go through within my very own daily life and can be he best book for at any time.

-- *Leanne Cremin*

Absolutely essential study ebook. It is among the most remarkable book i have got read through. You will like how the article writer compose this pdf.

-- *Jessie Rau*