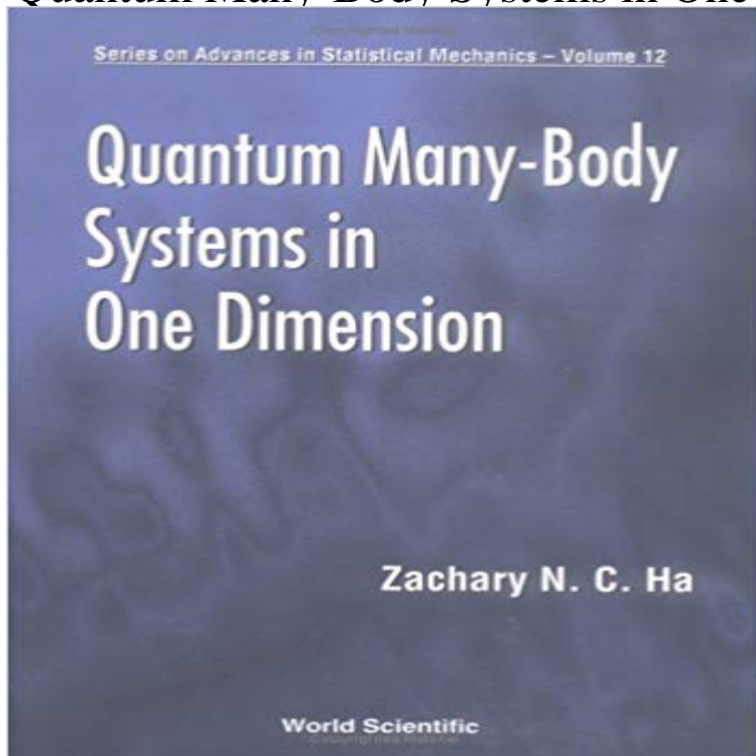


Quantum Many-Body Systems in One Dimension (Series in Algebra)



The main theme of the book is focused on the intimate connection between the two families of exactly solvable models: the inverse-square exchange (ISE) and the nearest-neighbour exchange (NNE) models. The latter are better known as the Bethe-ansatz solvable models and include the Heisenberg spin chain, t-J models, Hubbard models, etc. The former, the Calogero-Sutherland family of models, are simple to solve and contain essentially the same physics as the NNE family. The author introduces and discusses the current topics, such as the Luttinger liquid concept, fractional statistics, and spin-charge separation, in the context of the explicit models.

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