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Quantum Classical Correspondence: The 4th Drexel Symposium on Quantum Nonintegrability

Description

A serendipitous development of theoretical physics in the past decade was the apparent confluence of some major issues in several areas of physics: quantum measurement, quantum cosmology and semiclassical gravity, quantum chaos and mesoscopic physics. Although these areas address vastly different aspects of physics, covering atomic, molecular and quantum optics, condensed matter, nuclear as well as particle physics and general relativity, they all share the common concern of how the many quantum and classical features of matter and space-time and their dynamics are related to each other. This fundamental issue, which lies at the base of all aspects of physics, is the theme of the conference at Drexel University. The series of three conferences held at Drexel University on Quantum Nonintegrability were devoted to the forum on "quantum chaos" and related topics. In view of the rapid development in the physics of the quantum / classical interface, the conference organizers feel that it is timely to broaden the scope of the symposium to encompass one unifying theme: quantum-classical correspondence.

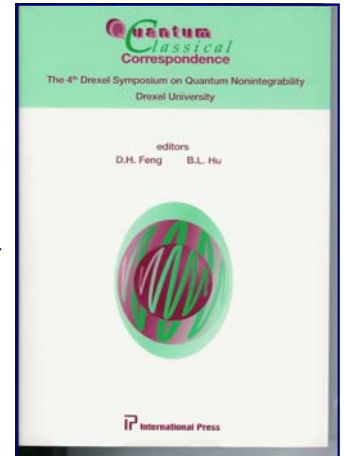


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 S. Sternberg
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Quantum Groups: from CoAlgebras to Drinfeld Algebras

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The theory of quantum groups is an exciting field of active research in which pure mathematics and mathematical physics interact. This book is based on lectures at the Ne'eman-Sternberg seminar in theoretical physics at the Sackler Institute for Advanced Studies at Tel-Aviv University. It provides a comprehensive introduction to the field, including topology and statistical mechanics. Detailed proofs of the main results, some of which appear here for the first time, are presented in the text. In addition, this volume offers an extensive, up-to-date bibliography containing more than 1260 references.

