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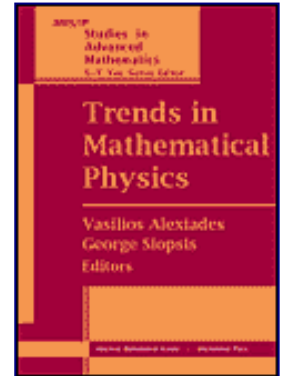
Description

This volume presents the proceedings of the conference on "Trends in Mathematical Physics" held at the University of Tennessee. The conference drew international experts from mathematical and computational physics. The following topics were addressed: superstrings and quantum gravity, pattern formation, and crystallographic topology. The cutting-edge research reflected in the extensive surveys in the book are written for a diverse audience.

Trends in Mathematical Physics

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Editors: Cumrun Vafa and Shing Tung Yau
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Description

The collection of articles in this volume are based on lectures presented during the Winter School on Mirror Symmetry held at Harvard University. There are many new directions suggested by mirror symmetry which could potentially have very rich connections in physics and mathematics. This book brings together the latest research in a major area of mathematical physics, including the recent progress in mirror manifolds and Lagrangian submanifolds. In particular, several articles describing homological approach and related topics are included. Other AMS titles in the *AMS/IP Studies in Advanced Mathematics series* include, Mirror Symmetry III, Volume 10, Mirror symmetry II, Volume 1, and Mirror Symmetry I, Volume 9.

Winter School on Mirror Symmetry, Vector Bundles and Lagrangian Submanifolds

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