Título:

Autor:

Editorial:

Tema:

Sinopsis

Precio: $459.00

Año: 2009

Edición: 1ª

ISBN: 9780821849224

String theory is the leading candidate for a physical theory that combines all the fundamental forces of nature, as well as the principles of relativity and quantum mechanics, into a mathematically elegant whole. The mathematical tools used by string theorists are highly sophisticated, and cover many areas of mathematics. As with the birth of quantum theory in the early 20th century, the mathematics has benefited at least as much as the physics from the collaboration. In this book, based on CBMS lectures given at Texas Christian University, Rosenberg describes some of the most recent interplay between string dualities and topology and operator algebras.

The book is an interdisciplinary approach to duality symmetries in string theory. It can be read by either mathematicians or theoretical physicists, and involves a more-or-less equal mixture of algebraic topology, operator algebras, and physics. There is also a bit of algebraic geometry, especially in the last chapter. The reader is assumed to be somewhat familiar with at least one of these four subjects, but not necessarily with all or even most of them. The main objective of the book is to show how several seemingly disparate subjects are closely linked with one another, and to give readers an overview of some areas of current research, even if this means that not everything is covered systematically.

A co-publication of the AMS and CBMS.