

1. Record Nr.	UNINA990000852310403321
Autore	O'neill, Barrett
Titolo	Elementary Differential Geometry / B. O'Neill
Pubbl/distr/stampa	New York : Academic Press, 1966
ISBN	0-12-526750-9
Descrizione fisica	VIII, 411 p. ; 24 cm
Disciplina	516
Locazione	FINBN
Collocazione	02 14 C 2
Lingua di pubblicazione	Italiano
Formato	Materiale a stampa
Livello bibliografico	Monografia
2. Record Nr.	UNINA9910741181903321
Autore	Graña Mariana
Titolo	String Theory Compactifications / / by Mariana Graña, Hagen Triendl
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2017
ISBN	3-319-54316-4
Edizione	[1st ed. 2017.]
Descrizione fisica	1 online resource (VII, 74 p. 6 illus., 3 illus. in color.)
Collana	SpringerBriefs in Physics, , 2191-5423
Disciplina	530
Soggetti	Quantum field theory String models Mathematical physics Quantum Field Theories, String Theory Mathematical Applications in the Physical Sciences
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.

Nota di contenuto

Chapter 1 Lecture 1: Introduction to String Theory -- Chapter 2 Lecture 2: Compactifications on tori -- Chapter 3 Lecture 3: Calabi-Yau Compactifications -- Chapter 4 Lecture 4: Fluxes and Generalized Geometry -- Chapter 5 Lecture 5: 4D Effective actions for compactifications on manifolds of reduced structure -- Chapter 6 Lecture 6: Open problems in phenomenology .

Sommario/riassunto

The lectures in this book provide graduate students and non-specialist researchers with a concise introduction to the concepts and formalism required to reduce the ten-dimensional string theories to the observable four-dimensional space-time - a procedure called string compactification. The text starts with a very brief introduction to string theory, first working out its massless spectrum and showing how the condition on the number of dimensions arises. It then dwells on the different possible internal manifolds, from the simplest to the most relevant phenomenologically, thereby showing that the most elegant description is through an extension of ordinary Riemannian geometry termed generalized geometry, which was first introduced by Hitchin. Last but not least, the authors review open problems in string phenomenology, such as the embedding of the Standard Model and obtaining de Sitter solutions.