



# **String Theory and Particle Physics: An Introduction to String Phenomenology**

By Luis E. Ibáñez, Angel M. Uranga



String Theory and Particle Physics: An Introduction to String Phenomenology By Luis E. Ibáñez, Angel M. Uranga

String theory is one of the most active branches of theoretical physics and has the potential to provide a unified description of all known particles and interactions. This book is a systematic introduction to the subject, focused on the detailed description of how string theory is connected to the real world of particle physics. Aimed at graduate students and researchers working in high energy physics, it provides explicit models of physics beyond the Standard Model. No prior knowledge of string theory is required as all necessary material is provided in the introductory chapters. The book provides particle phenomenologists with the information needed to understand string theory model building and describes in detail several alternative approaches to model building, such as heterotic string compactifications, intersecting D-brane models, D-branes at singularities and F-theory.



Read Online String Theory and Particle Physics: An Introduct ...pdf

## String Theory and Particle Physics: An Introduction to String Phenomenology

By Luis E. Ibáñez, Angel M. Uranga

**String Theory and Particle Physics: An Introduction to String Phenomenology** By Luis E. Ibáñez, Angel M. Uranga

String theory is one of the most active branches of theoretical physics and has the potential to provide a unified description of all known particles and interactions. This book is a systematic introduction to the subject, focused on the detailed description of how string theory is connected to the real world of particle physics. Aimed at graduate students and researchers working in high energy physics, it provides explicit models of physics beyond the Standard Model. No prior knowledge of string theory is required as all necessary material is provided in the introductory chapters. The book provides particle phenomenologists with the information needed to understand string theory model building and describes in detail several alternative approaches to model building, such as heterotic string compactifications, intersecting D-brane models, D-branes at singularities and F-theory.

## String Theory and Particle Physics: An Introduction to String Phenomenology By Luis E. Ibáñez, Angel M. Uranga Bibliography

Sales Rank: #1474536 in Books
Published on: 2012-03-19
Original language: English

• Number of items: 1

• Dimensions: 9.72" h x 1.30" w x 6.85" l, 3.25 pounds

• Binding: Hardcover

• 688 pages

**▶ Download** String Theory and Particle Physics: An Introductio ...pdf

**Read Online** String Theory and Particle Physics: An Introduct ...pdf

## Download and Read Free Online String Theory and Particle Physics: An Introduction to String Phenomenology By Luis E. Ibáñez, Angel M. Uranga

#### **Editorial Review**

#### Review

#### **ENDORSEMENT:**

"... invaluable as a textbook for curious students, and a reference volume of lasting value for experts working in the field. If, as many of us hope, the LHC era reveals new clues linking particle physics to string-scale physics, acquaintance with the material in this volume may well provide crucial tools for exploring and exploiting those links."

Shamit Kachru, Stanford University and SLAC

#### **ENDORSEMENT:**

"A clear exposition of the main ideas and ingredients necessary to connect string theory to the real world. An essential toolkit for the string theory model builder"

Juan Maldacena, Institute for Advanced Study, Princeton

#### **ENDORSEMENT:**

"...invaluable and comprehensive material for graduate students entering the field, for non-string theorists who want to expand their research projects but also as the best authoritative source of information for active string theorists. This will be the standard reference on this active field for years to come."

Fernando Quevedo, Professor of Theoretical Physics, DAMTP, University of Cambridge and Director ICTP, Trieste

#### **ENDORSEMENT:**

"The scope of this book is impressive, covering all the major developments in the construction of compactified string theories. As an introduction to string theory it is excellent and, as a tool for constructing realistic models, unmatched. Essential reading for all those wishing to study string theory in depth and an invaluable reference for those already expert in the field."

Graham Ross, University of Oxford

"This is an excellent book which will introduce the reader to the main topics of relevance in string phenomenology today, and it is also a very good reference book. As well as wide coverage, the authors have included many helpful comments and discussions about specific methods and models. In addition, the production of the book is of very high quality, making it enjoyable to read. Naturally the field is continually progressing so this book will not always be cutting-edge, but I think it will likely remain a very useful introductory text for many years to come."

Douglas J. Smith, Mathematical Reviews

#### About the Author

Luis E. Ibáñez is Professor of Theoretical Physics at the Universidad Autónoma de Madrid and member of the Instituto de Física Teórica-UAM/CSIC. One of the world leaders in physics beyond the Standard Model of particle physics, he has made important contributions to the construction of the supersymmetric Standard Model and superstring phenomenology.

Angel M. Uranga is Research Professor at the Consejo Superior de Investigaciones Científicas at the Instituto de Física Teórica-UAM/CSIC. He is one of the leading young string theorists working in the construction of models of particle physics, in particular due to his contribution on the use of D-branes to

build realistic brane-world models.

#### **Users Review**

#### From reader reviews:

#### **Hazel Polk:**

This String Theory and Particle Physics: An Introduction to String Phenomenology book is simply not ordinary book, you have it then the world is in your hands. The benefit you get by reading this book is information inside this guide incredible fresh, you will get data which is getting deeper an individual read a lot of information you will get. This kind of String Theory and Particle Physics: An Introduction to String Phenomenology without we know teach the one who studying it become critical in thinking and analyzing. Don't become worry String Theory and Particle Physics: An Introduction to String Phenomenology can bring once you are and not make your carrier space or bookshelves' grow to be full because you can have it with your lovely laptop even telephone. This String Theory and Particle Physics: An Introduction to String Phenomenology having good arrangement in word as well as layout, so you will not truly feel uninterested in reading.

#### **Terry White:**

Reading a book being new life style in this 12 months; every people loves to examine a book. When you study a book you can get a lots of benefit. When you read textbooks, you can improve your knowledge, due to the fact book has a lot of information onto it. The information that you will get depend on what sorts of book that you have read. If you wish to get information about your examine, you can read education books, but if you act like you want to entertain yourself look for a fiction books, this kind of us novel, comics, and also soon. The String Theory and Particle Physics: An Introduction to String Phenomenology offer you a new experience in looking at a book.

#### **Robert Beck:**

As we know that book is vital thing to add our knowledge for everything. By a book we can know everything we wish. A book is a group of written, printed, illustrated or perhaps blank sheet. Every year ended up being exactly added. This publication String Theory and Particle Physics: An Introduction to String Phenomenology was filled in relation to science. Spend your spare time to add your knowledge about your research competence. Some people has various feel when they reading a new book. If you know how big selling point of a book, you can really feel enjoy to read a reserve. In the modern era like currently, many ways to get book that you just wanted.

#### Mary Brown:

Some individuals said that they feel fed up when they reading a e-book. They are directly felt it when they get a half areas of the book. You can choose typically the book String Theory and Particle Physics: An Introduction to String Phenomenology to make your own personal reading is interesting. Your skill of reading ability is developing when you such as reading. Try to choose basic book to make you enjoy to study

it and mingle the feeling about book and looking at especially. It is to be first opinion for you to like to open up a book and read it. Beside that the book String Theory and Particle Physics: An Introduction to String Phenomenology can to be your brand-new friend when you're truly feel alone and confuse in what must you're doing of these time.

Download and Read Online String Theory and Particle Physics: An Introduction to String Phenomenology By Luis E. Ibáñez, Angel M. Uranga #3NQC8UYFZS5

# Read String Theory and Particle Physics: An Introduction to String Phenomenology By Luis E. Ibáñez, Angel M. Uranga for online ebook

String Theory and Particle Physics: An Introduction to String Phenomenology By Luis E. Ibáñez, Angel M. Uranga Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read String Theory and Particle Physics: An Introduction to String Phenomenology By Luis E. Ibáñez, Angel M. Uranga books to read online.

Online String Theory and Particle Physics: An Introduction to String Phenomenology By Luis E. Ibáñez, Angel M. Uranga ebook PDF download

String Theory and Particle Physics: An Introduction to String Phenomenology By Luis E. Ibáñez, Angel M. Uranga Doc

String Theory and Particle Physics: An Introduction to String Phenomenology By Luis E. Ibáñez, Angel M. Uranga Mobipocket

String Theory and Particle Physics: An Introduction to String Phenomenology By Luis E. Ibáñez, Angel M. Uranga EPub