



# Extra Dimensions in Space and Time (Multiversal Journeys)

Itzhak Bars, John Terning

Download now

Click here if your download doesn"t start automatically

#### **Extra Dimensions in Space and Time (Multiversal Journeys)**

Itzhak Bars, John Terning

#### Extra Dimensions in Space and Time (Multiversal Journeys) Itzhak Bars, John Terning

In physics, the idea of extra spatial dimensions originates from Nordstöm's 5-dimensional vector theory in 1914, followed by Kaluza-Klein theory in 1921, in an effort to unify general relativity and electromagnetism in a 5 dimensional space-time (4 dimensions for space and 1 for time). Kaluza-Klein theory didn't generate enough interest with physicist for the next five decades, due to its problems with inconsistencies. With the advent of supergravity theory (the theory that unifies general relativity and supersymmetry theories) in late 1970's and eventually, string theories (1980s) and M-theory (1990s), the dimensions of space-time increased to 11 (10-space and 1-time dimension).

There are two main features in this book that differentiates it from other books written about extra dimensions: The first feature is the coverage of extra dimensions in time (Two Time physics), which has not been covered in earlier books about extra dimensions. All other books mainly cover extra spatial dimensions. The second feature deals with level of presentation. The material is presented in a non-technical language followed by additional sections (in the form of appendices or footnotes) that explain the basic equations and formulas in the theories. This feature is very attractive to readers who want to find out more about the theories involved beyond the basic description for a layperson. The text is designed for scientifically literate non-specialists who want to know the latest discoveries in theoretical physics in a non-technical language. Readers with basic undergraduate background in modern physics and quantum mechanics can easily understand the technical sections.

Part I starts with an overview of the Standard Model of particles and forces, notions of Einstein's special and general relativity, and the overall view of the universe from the Big Bang to the present epoch, and covers Two-Time physics. 2T-physics has worked correctly at all scales of physics, both macroscopic and microscopic, for which there is experimental data so far. In addition to revealing hidden information even in familiar "everyday" physics, it also makes testable predictions in lesser known physics regimes that could be analyzed at the energy scales of the Large Hadron Collider at CERN or in cosmological observations."

Part II of the book is focused on extra dimensions of space. It covers the following topics: The Popular View of Extra Dimensions, Einstein and the Fourth Dimension, Traditional Extra Dimensions, Einstein's Gravity, The Theory Formerly Known as String, Warped Extra Dimensions, and How Do We Look For Extra Dimensions?

**Download** Extra Dimensions in Space and Time (Multiversal Jo ...pdf

Read Online Extra Dimensions in Space and Time (Multiversal ...pdf

### Download and Read Free Online Extra Dimensions in Space and Time (Multiversal Journeys) Itzhak Bars, John Terning

#### From reader reviews:

#### Maria Saad:

Now a day people that Living in the era everywhere everything reachable by connect to the internet and the resources inside can be true or not demand people to be aware of each info they get. How a lot more to be smart in obtaining any information nowadays? Of course the reply is reading a book. Looking at a book can help people out of this uncertainty Information mainly this Extra Dimensions in Space and Time (Multiversal Journeys) book as this book offers you rich data and knowledge. Of course the information in this book hundred per cent guarantees there is no doubt in it you may already know.

#### John Bradley:

Nowadays reading books be than want or need but also be a life style. This reading routine give you lot of advantages. The benefits you got of course the knowledge even the information inside the book which improve your knowledge and information. The knowledge you get based on what kind of reserve you read, if you want get more knowledge just go with schooling books but if you want feel happy read one together with theme for entertaining including comic or novel. The particular Extra Dimensions in Space and Time (Multiversal Journeys) is kind of e-book which is giving the reader unforeseen experience.

#### **Debra Capone:**

Extra Dimensions in Space and Time (Multiversal Journeys) can be one of your nice books that are good idea. All of us recommend that straight away because this guide has good vocabulary that may increase your knowledge in vocabulary, easy to understand, bit entertaining but nevertheless delivering the information. The article writer giving his/her effort to get every word into enjoyment arrangement in writing Extra Dimensions in Space and Time (Multiversal Journeys) nevertheless doesn't forget the main point, giving the reader the hottest and based confirm resource details that maybe you can be certainly one of it. This great information could drawn you into completely new stage of crucial pondering.

#### **Ruth Mullins:**

Is it a person who having spare time then spend it whole day through watching television programs or just telling lies on the bed? Do you need something totally new? This Extra Dimensions in Space and Time (Multiversal Journeys) can be the answer, oh how comes? It's a book you know. You are so out of date, spending your extra time by reading in this completely new era is common not a nerd activity. So what these guides have than the others?

Download and Read Online Extra Dimensions in Space and Time (Multiversal Journeys) Itzhak Bars, John Terning #EKJ24WC3VS9

## Read Extra Dimensions in Space and Time (Multiversal Journeys) by Itzhak Bars, John Terning for online ebook

Extra Dimensions in Space and Time (Multiversal Journeys) by Itzhak Bars, John Terning 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 Extra Dimensions in Space and Time (Multiversal Journeys) by Itzhak Bars, John Terning books to read online.

## Online Extra Dimensions in Space and Time (Multiversal Journeys) by Itzhak Bars, John Terning ebook PDF download

Extra Dimensions in Space and Time (Multiversal Journeys) by Itzhak Bars, John Terning Doc

Extra Dimensions in Space and Time (Multiversal Journeys) by Itzhak Bars, John Terning Mobipocket

Extra Dimensions in Space and Time (Multiversal Journeys) by Itzhak Bars, John Terning EPub