



Introduction to Particle Cosmology: The Standard Model of Cosmology and its Open Problems (UNITEXT for Physics)

By Cosimo Bambi, Alexandre D. Dolgov

Download now

Read Online ➔

Introduction to Particle Cosmology: The Standard Model of Cosmology and its Open Problems (UNITEXT for Physics) By Cosimo Bambi, Alexandre D. Dolgov

This book introduces the basic concepts of particle cosmology and covers all the main aspects of the Big Bang Model (expansion of the Universe, Big Bang Nucleosynthesis, Cosmic Microwave Background, large scale structures) and the search for new physics (inflation, baryogenesis, dark matter, dark energy). It also includes the majority of recent discoveries, such as the precise determination of cosmological parameters using experiments like WMAP and Planck, the discovery of the Higgs boson at LHC, the non-discovery to date of supersymmetric particles, and the search for the imprint of gravitational waves on the CMB polarization by Planck and BICEP.

This textbook is based on the authors' courses on Cosmology, and aims at introducing Particle Cosmology to senior undergraduate and graduate students. It has been especially written to be accessible even for those students who do not have a strong background in General Relativity and quantum field theory. The content of this book is organized in an easy-to-use style and students will find it a helpful research guide.

 [Download Introduction to Particle Cosmology: The Standard M ...pdf](#)

 [Read Online Introduction to Particle Cosmology: The Standard ...pdf](#)

Introduction to Particle Cosmology: The Standard Model of Cosmology and its Open Problems (UNITEXT for Physics)

By Cosimo Bambi, Alexandre D. Dolgov

Introduction to Particle Cosmology: The Standard Model of Cosmology and its Open Problems (UNITEXT for Physics) By Cosimo Bambi, Alexandre D. Dolgov

This book introduces the basic concepts of particle cosmology and covers all the main aspects of the Big Bang Model (expansion of the Universe, Big Bang Nucleosynthesis, Cosmic Microwave Background, large scale structures) and the search for new physics (inflation, baryogenesis, dark matter, dark energy). It also includes the majority of recent discoveries, such as the precise determination of cosmological parameters using experiments like WMAP and Planck, the discovery of the Higgs boson at LHC, the non-discovery to date of supersymmetric particles, and the search for the imprint of gravitational waves on the CMB polarization by Planck and BICEP.

This textbook is based on the authors' courses on Cosmology, and aims at introducing Particle Cosmology to senior undergraduate and graduate students. It has been especially written to be accessible even for those students who do not have a strong background in General Relativity and quantum field theory. The content of this book is organized in an easy-to-use style and students will find it a helpful research guide.

Introduction to Particle Cosmology: The Standard Model of Cosmology and its Open Problems (UNITEXT for Physics) By Cosimo Bambi, Alexandre D. Dolgov **Bibliography**

- Sales Rank: #3861136 in Books
- Published on: 2015-08-15
- Original language: English
- Number of items: 1
- Dimensions: 9.50" h x .78" w x 6.17" l, 1.40 pounds
- Binding: Hardcover
- 251 pages

 [Download Introduction to Particle Cosmology: The Standard M ...pdf](#)

 [Read Online Introduction to Particle Cosmology: The Standard ...pdf](#)

Editorial Review

Review

“This book describes the so-called Standard Cosmological Model. ... The present book is intended for senior undergraduate and graduate physics students interested in cosmology. It is not necessary that they possess a strong background in theoretical high energy physics.” (Claudia-Veronika Meister, zbMATH 1334.85001, 2016)

From the Back Cover

This book introduces the basic concepts of particle cosmology and covers all the main aspects of the Big Bang Model (expansion of the Universe, Big Bang Nucleosynthesis, Cosmic Microwave Background, large scale structures) and the search for new physics (inflation, baryogenesis, dark matter, dark energy). It also includes the majority of recent discoveries, such as the precise determination of cosmological parameters using experiments like WMAP and Planck, the discovery of the Higgs boson at LHC, the non-discovery to date of supersymmetric particles, and the search for the imprint of gravitational waves on the CMB polarization by Planck and BICEP.

This textbook is based on the authors' courses on Cosmology, and aims at introducing Particle Cosmology to senior undergraduate and graduate students. It has been especially written to be accessible even for those students who do not have a strong background in General Relativity and quantum field theory. The content of this book is organized in an easy-to-use style and students will find it a helpful research guide.

About the Author

Cosimo Bambi is Professor at the Department of Physics of Fudan University. He received the PhD from Ferrara University (Italy) in 2007. He was a postdoc at Wayne State University (Michigan), at IPMU at The University of Tokyo (Japan), in the group of Prof. Dvali at LMU Munich (Germany). He moved to Fudan University at the end of 2012 under the Thousand Young Talents Program. His research interests cover several areas in gravity, cosmology, and high energy astrophysics. He has published over 80 research papers in refereed journals and 2 review papers.

DOLGOV Alexandre Dmitrievich is a professor at Universita di Ferrara, Dipartimento di Fisica, Italy; ITEP, Moscow, Russia; and Novosibirsk State University, Novosibirsk, Russia. He got his PhD (Candidate of Science in Russia) in 1969. He won Lenin Komsomol Award in 1973, Landau-Weizmann Award for theoretical physics in 1996, Pontecorvo Prize by JINR in 2009, Friedmann Prize by Russian Academy of sciences in 2011. His publications include more than 250 titles in English and Russian with an overall number of citations about 6500. Among them there are several review papers published in Reviews of Modern Physics, Physics Reports, Sov. Phys. Uspekhi, Surveys in High Energy Physics, and books "Kosmologiya Rannei Vselennoi" ("Cosmology of the early Universe"), MGU Publishers, Moscow, 1988 and "Basics of Modern Cosmology", Edition Frontier, Paris, 1990.2

Users Review

From reader reviews:

William Chapman:

With other case, little men and women like to read book Introduction to Particle Cosmology: The Standard Model of Cosmology and its Open Problems (UNITEXT for Physics). You can choose the best book if you like reading a book. Providing we know about how is important any book Introduction to Particle Cosmology: The Standard Model of Cosmology and its Open Problems (UNITEXT for Physics). You can add knowledge and of course you can around the world with a book. Absolutely right, simply because from book you can recognize everything! From your country until foreign or abroad you will end up known. About simple point until wonderful thing you are able to know that. In this era, we are able to open a book or perhaps searching by internet product. It is called e-book. You need to use it when you feel uninterested to go to the library. Let's study.

Steve Bennett:

The feeling that you get from Introduction to Particle Cosmology: The Standard Model of Cosmology and its Open Problems (UNITEXT for Physics) is the more deep you digging the information that hide into the words the more you get interested in reading it. It does not mean that this book is hard to understand but Introduction to Particle Cosmology: The Standard Model of Cosmology and its Open Problems (UNITEXT for Physics) giving you buzz feeling of reading. The copy writer conveys their point in specific way that can be understood by means of anyone who read this because the author of this guide is well-known enough. This particular book also makes your vocabulary increase well. That makes it easy to understand then can go along, both in printed or e-book style are available. We highly recommend you for having this particular Introduction to Particle Cosmology: The Standard Model of Cosmology and its Open Problems (UNITEXT for Physics) instantly.

Kurt Chapman:

Would you one of the book lovers? If yes, do you ever feeling doubt when you find yourself in the book store? Try to pick one book that you find out the inside because don't judge book by its protect may doesn't work is difficult job because you are scared that the inside maybe not because fantastic as in the outside search likes. Maybe you answer may be Introduction to Particle Cosmology: The Standard Model of Cosmology and its Open Problems (UNITEXT for Physics) why because the amazing cover that make you consider regarding the content will not disappoint a person. The inside or content is usually fantastic as the outside or maybe cover. Your reading sixth sense will directly show you to pick up this book.

Veronica Lopez:

Don't be worry for anyone who is afraid that this book may filled the space in your house, you might have it in e-book means, more simple and reachable. This particular Introduction to Particle Cosmology: The Standard Model of Cosmology and its Open Problems (UNITEXT for Physics) can give you a lot of close friends because by you taking a look at this one book you have point that they don't and make anyone more

like an interesting person. This specific book can be one of one step for you to get success. This book offer you information that perhaps your friend doesn't understand, by knowing more than additional make you to be great people. So , why hesitate? Let's have Introduction to Particle Cosmology: The Standard Model of Cosmology and its Open Problems (UNITEXT for Physics).

**Download and Read Online Introduction to Particle Cosmology:
The Standard Model of Cosmology and its Open Problems
(UNITEXT for Physics) By Cosimo Bambi, Alexandre D. Dolgov
#1CU5OZSL27Y**

Read Introduction to Particle Cosmology: The Standard Model of Cosmology and its Open Problems (UNITEXT for Physics) By Cosimo Bambi, Alexandre D. Dolgov for online ebook

Introduction to Particle Cosmology: The Standard Model of Cosmology and its Open Problems (UNITEXT for Physics) By Cosimo Bambi, Alexandre D. Dolgov 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
Introduction to Particle Cosmology: The Standard Model of Cosmology and its Open Problems (UNITEXT for Physics) By Cosimo Bambi, Alexandre D. Dolgov books to read online.

Online Introduction to Particle Cosmology: The Standard Model of Cosmology and its Open Problems (UNITEXT for Physics) By Cosimo Bambi, Alexandre D. Dolgov ebook PDF download

Introduction to Particle Cosmology: The Standard Model of Cosmology and its Open Problems (UNITEXT for Physics) By Cosimo Bambi, Alexandre D. Dolgov Doc

Introduction to Particle Cosmology: The Standard Model of Cosmology and its Open Problems (UNITEXT for Physics) By Cosimo Bambi, Alexandre D. Dolgov Mobipocket

Introduction to Particle Cosmology: The Standard Model of Cosmology and its Open Problems (UNITEXT for Physics) By Cosimo Bambi, Alexandre D. Dolgov EPub

1CU5OZSL27Y: Introduction to Particle Cosmology: The Standard Model of Cosmology and its Open Problems (UNITEXT for Physics) By Cosimo Bambi, Alexandre D. Dolgov