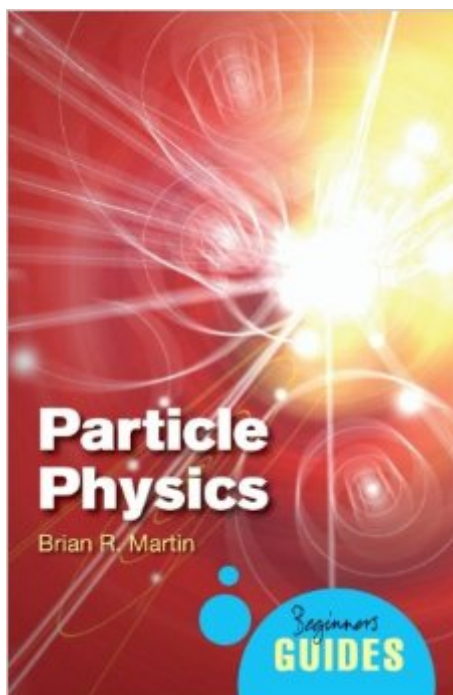# Particle Physics: A Beginner's Guide (Beginner's Guides)

Synopsis

Gaining a following since the launch of the infamous Large Hadron Collider, particle physics explores our most fundamental and mind-blowing questions: How did the Universe start? What are we made of? How small is the smallest thing? Without presuming any prior scientific knowledge, Brian R. Martin takes readers on a wide-ranging tour of the field, from its beginnings in nuclear physics to the discovery of quarks and cutting-edge research into string theory, the mystery of antimatter, and the current search for the elusive “God particle.â • Brian R. Martin is emeritus professor of physics at University College London, where he chaired the physics department until 2004.

Book Information

Series: Beginner's Guides

Paperback: 224 pages

Publisher: Oneworld Publications; Beginner's Guides edition (April 1, 2011)

Language: English

ISBN-10: 1851687866

ISBN-13: 978-1851687862

Product Dimensions: 5.4 x 0.6 x 7.9 inches

Shipping Weight: 10.7 ounces (View shipping rates and policies)

Average Customer Review: 4.7 out of 5 starsÂ Â See all reviewsÂ (20 customer reviews)

Best Sellers Rank: #498,070 in Books (See Top 100 in Books)   #76 inÂ Books > Science & Math > Physics > Nuclear Physics > Particle Physics

Customer Reviews

Learned a lot of fascinating things, but as a non-scientist, it was pretty technical. You don't really need a physics background, and they're aren't any math equations, but it was so full of information that it feels like I'm taking a college course. I guess with a subject as difficult as this, if it were simplified I wouldn't really learn that much. I've read a few other books on the subject (Particle Physics: A Very Short Introduction by Frank Close, Facts and Mysteries in Elementary Particle Physics by Martinus Veltman and The Particle Garden by Gordon Kane). I learned a lot by each one, because they each cover physics in a different way. If you are willing to put in some time and effort, you will be rewarded.For beginners, I would recommend going to the Wikipedia article about particle physics, and saving and printing the purple, green, red and yellow chart with all the particles; and cutting, saving and printing the chart with the 61 particles. The Particle Adventure is

also a great free beginner website.

This book is straight forward and tries to present an elementary overview of a very complex and detailed subject: particle physics. For a college student looking for an intro and overview of the body of this science, it's pretty effective. As a primer for non-math/science geeks, it lacks a level of analogy and practical application and tends to dwell in the details. This latter is how the book was recommended to me by a world-renowned physicist, but the author states that he was aiming more at doing a good job of the former.This is one of those books you really need to read in small doses and make your own notes as you go if you want to actually glean the knowledge it seeks to transfer. The details...new terminology, strange concepts, key relationships and interactions...come at you rapid fire. The book has a good glossary that helps to reduce frustration. It is more of a text book in basic particle physics than I had hoped, but my expectations were probably unrealistic. After all, we're talking about particle physics. It makes for good bedtime reading if you're interested in particle physics and don't have much exposure to it, because it will put you to sleep on a chapter by chapter basis.

Very well written, understandable, clear, would recommend to anyone interested at the beginners level, distinctly outlines the underlying principles and foundations.

I really enjoyed this book. I had read F. Close's "Short intro to particle physics" which laid a nice groundwork for me to be able continue my learning through this book.

I found the information useful, however I am a retired Physicist. I don't know how a layman would find it.

Thank you, thank you, thank you. Just what the doctor ordered, Not only an excellently written book but well researched and informative. Overall a great read. 5 stars

A good start to understanding - but, only a start, still much to really understand.

great read with a lot of content in an approachable manner

Particle Physics: A Beginner's Guide (Beginner's Guides) Lie Algebras In Particle Physics: from

Isospin To Unified Theories (Frontiers in Physics) Lie Algebras in Particle Physics: From Isospin to Unified Theories (Frontiers in Physics, Vol. 54) Gauge Theories in Particle Physics, Second Edition (Graduate Student Series in Physics) Advances in Imaging and Electron Physics, Volume 161: Optics of Charged Particle Analyzers Most Wanted Particle: The Inside Story of the Hunt for the Higgs, the Heart of the Future of Physics Symmetry and the Standard Model: Mathematics and Particle Physics Particle Physics: A Very Short Introduction (Very Short Introductions) Gauge Theories in Particle Physics: A Practical Introduction, Fourth Edition - 2 Volume set Statistical Analysis Techniques in Particle Physics: Fits, Density Estimation and Supervised Learning Nuclear and Particle Physics (Oxford Science Publications) Concepts of Particle Physics: Volume I Nuclear and Particle Physics: An Introduction Quantum Theory of Many-Particle Systems (Dover Books on Physics) The Solid State: An Introduction to the Physics of Crystals for Students of Physics, Materials Science, and Engineering (Oxford Physics Series) Bayesian Signal Processing: Classical, Modern and Particle Filtering Methods (Adaptive and Cognitive Dynamic Systems: Signal Processing, Learning, Communications and Control) Characterization of Porous Solids and Powders: Surface Area, Pore Size and Density (Particle Technology Series) Particle Size Analysis In Pharmaceutics And Other Industries: Theory And Practice (Prentice Hall International Series in Computer Science) Particle Size Analysis In Pharmaceutics And Other Industries (Prentice Hall International Series in Computer Science) Quantum Many-particle Systems (Advanced Books Classics)