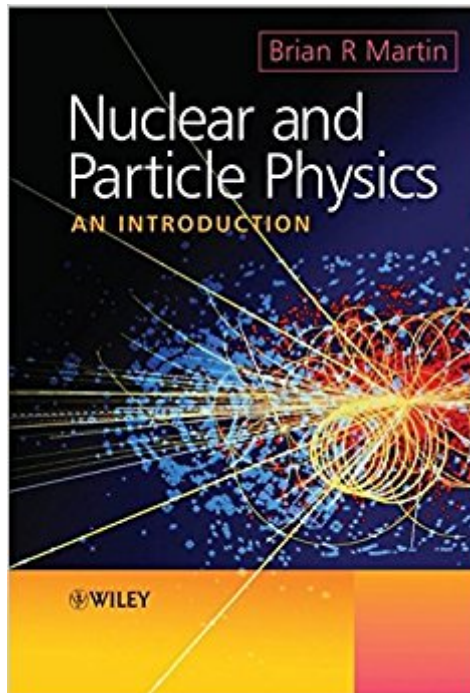




Ebook Directory
the best source of ebook

The book was found

Nuclear And Particle Physics: An Introduction



Synopsis

Nuclear and Particle Physics is an accessible, balanced introduction to the subject and provides a readable and up-to-date overview of both the theoretical and experimental aspects of nuclear and particle physics. The emphasis is on the phenomenological approach to understanding experimental phenomena. The text opens with an introduction to the basic concepts used in nuclear and particle physics and then moves on to describe their respective phenomenologies and experimental methods. Later chapters explore the interpretation of data via models and theories, including the standard model of particle physics and the liquid drop model and shell model of nuclear physics. Several applications of nuclear physics are discussed, including nuclear medicine and the production of power from nuclear fission and fusion. The book closes with a chapter on outstanding problems, including extensions to the standard model, implications for particle astrophysics, improvements in medical imaging and the prospects for power production. Problems are included at the end of each chapter, with a full set of solutions provided. Accessible overview of nuclear and particle physics suitable for a first course in the subject. Chapters are supplemented by an extensive set of problems with full solutions. Includes Appendices on some topics in quantum mechanics and relativistic kinematics. An invaluable text for all physics and astronomy students.

Book Information

Hardcover: 428 pages

Publisher: Wiley; 1 edition (April 28, 2006)

Language: English

ISBN-10: 0470019999

ISBN-13: 978-0470019993

Product Dimensions: 6.8 x 1.2 x 9.9 inches

Shipping Weight: 2.2 pounds (View shipping rates and policies)

Average Customer Review: 4.6 out of 5 stars 2 customer reviews

Best Sellers Rank: #817,269 in Books (See Top 100 in Books) #103 in Books > Science & Math > Physics > Nuclear Physics > Atomic & Nuclear Physics #124 in Books > Science & Math > Physics > Nuclear Physics > Particle Physics #2451 in Books > Textbooks > Science & Mathematics > Physics

Customer Reviews

"This is a text that would be good for both lecturer and student." (The Higher Education Academy Physical Sciences Centre, December 2008) "Enthusiastically recommended as a useful addition to

any college or university library." (CHOICE, December 2006)

Nuclear and Particle Physics is an accessible, balanced introduction to the subject and provides a readable and up-to-date overview of both the theoretical and experimental aspects of nuclear and particle physics. The emphasis is on the phenomenological approach to understanding experimental phenomena. The text opens with an introduction to the basic concepts used in nuclear and particle physics and then moves on to describe their respective phenomenologies and experimental methods. Later chapters explore the interpretation of data via models and theories, including the standard model of particle physics and the liquid drop model and shell model of nuclear physics. Several applications of nuclear physics are discussed, including nuclear medicine and the production of power from nuclear fission and fusion. The book closes with a chapter on outstanding problems, including extensions to the standard model, implications for particle astrophysics, improvements in medical imaging and the prospects for power production. Problems are included at the end of each chapter, with a full set of solutions provided. Accessible overview of nuclear and particle physics suitable for a first course in the subject. Chapters are supplemented by an extensive set of problems with full solutions. Includes Appendices on some topics in quantum mechanics and relativistic kinematics. An invaluable text for all physics and astronomy students.

I was looking for a text discussion of the Standard Model of Particle Physics to supplement my reading of Warped Passages. This textbook is the same vintage and is well organized for my purpose including a discussion of accelerators which supplements nicely. It was also a good price (good value) for this kind of textbook.

This kind of text is very good for beginning students and as reference. There are nice diagrams of new machines, mentions of breaks in the standard model and neutrino mass. The Klein-Gordon equation is given in its natural dimensional units of $1/\text{length}^2$ which is better than in many texts that I have that use more artificial units in Messiah, Weinberg and Gordon Kane. The text lacks a necessary approach to quantum groups or I would have given it 5 stars.

[Download to continue reading...](#)

Finite Element Methods for Particle Transport: Applications to Reactor and Radiation Physics (Research Studies in Particle and Nuclear Technology) Quantum Electrodynamics: Gribov Lectures on Theoretical Physics (Cambridge Monographs on Particle Physics, Nuclear Physics and Cosmology) Nuclear Prepared - How to Prepare for a Nuclear Attack and What to do Following a

Nuclear Blast: Everything you Need to Know to Plan and Prepare for a Nuclear Attack Nuclear energy. Radioactivity. Engineering in Nuclear Power Plants: Easy course for understanding nuclear energy and engineering in nuclear power plans (Radioactive Disintegration) Nuclear and Particle Physics: An Introduction The Neutron: A Tool and an Object in Nuclear and Particle Physics Nuclear and Particle Physics (Cambridge Advanced Sciences) Handbook of Nuclear Chemistry: Vol. 1: Basics of Nuclear Science; Vol. 2: Elements and Isotopes: Formation, Transformation, Distribution; Vol. 3: ... Nuclear Energy Production and Safety Issues. Statistical Methods for Data Analysis in Particle Physics (Lecture Notes in Physics) Lie Algebras In Particle Physics: from Isospin To Unified Theories (Frontiers in Physics) Particle Accelerator Physics (Graduate Texts in Physics) From Special Relativity to Feynman Diagrams: A Course in Theoretical Particle Physics for Beginners (UNITEXT for Physics) Gauge Theories in Particle Physics, Second Edition (Graduate Student Series in Physics) Nuclear Reaction Data and Nuclear Reactors: Physics, Design, and Safety An Introduction to Particle Physics and the Standard Model Particle Physics: A Very Short Introduction Particle Physics: A Very Short Introduction (Very Short Introductions) An Introduction to the Standard Model of Particle Physics Gauge Theories in Particle Physics: A Practical Introduction, Fourth Edition - 2 Volume set Introduction to Elementary Particle Physics

[Contact Us](#)

[DMCA](#)

[Privacy](#)

[FAQ & Help](#)