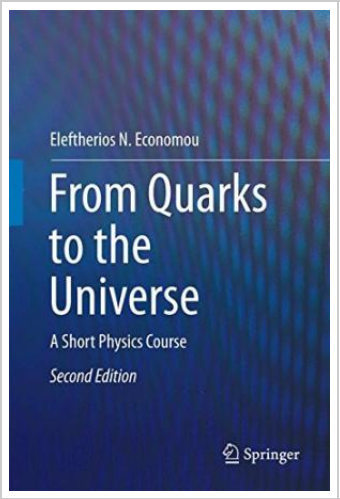

From Quarks to the Universe: A Short Physics Course

By Eleftherios N. Economou

Springer. Hardcover. Condition: New. 326 pages. This book takes the reader for a short journey over the structures of matter showing that their main properties can be obtained even at a quantitative level with a minimum background knowledge including first year calculus, the basic principles of quantum mechanics and the extensive use of dimensional analysis. The latter, besides some high school physics and mathematics, namely the atomic idea, the wave-particle duality and the minimization of energy as the condition for equilibrium are the basis of the book. Dimensional analysis employing the universal constants and combined with a little imagination and thinking, to quote Feynman, allow an amazing short-cut derivation of several quantitative results concerning the structures of matter. In the current 2nd edition, new material and more explanations with more detailed derivations were added to make the book more student-friendly. Many multiple-choice questions with the correct answers at the end of the book, solved and unsolved problems make the book also suitable as a textbook. This book is of interest to students of physics, engineering and other science and to researchers in physics, material science, chemistry and engineering who may find stimulating the alternative derivation of several real world results...

Reviews

Excellent e book and beneficial one. It is rally fascinating throgh reading through time period. You are going to like how the author publish this ebook.

-- ***Prof. Triston Smitham V***

An extremely wonderful ebook with lucid and perfect explanations. I was able to comprehended almost everything using this composed e publication. It is extremely difficult to leave it before concluding, once you begin to read the book.

-- ***Kimberly Carroll***