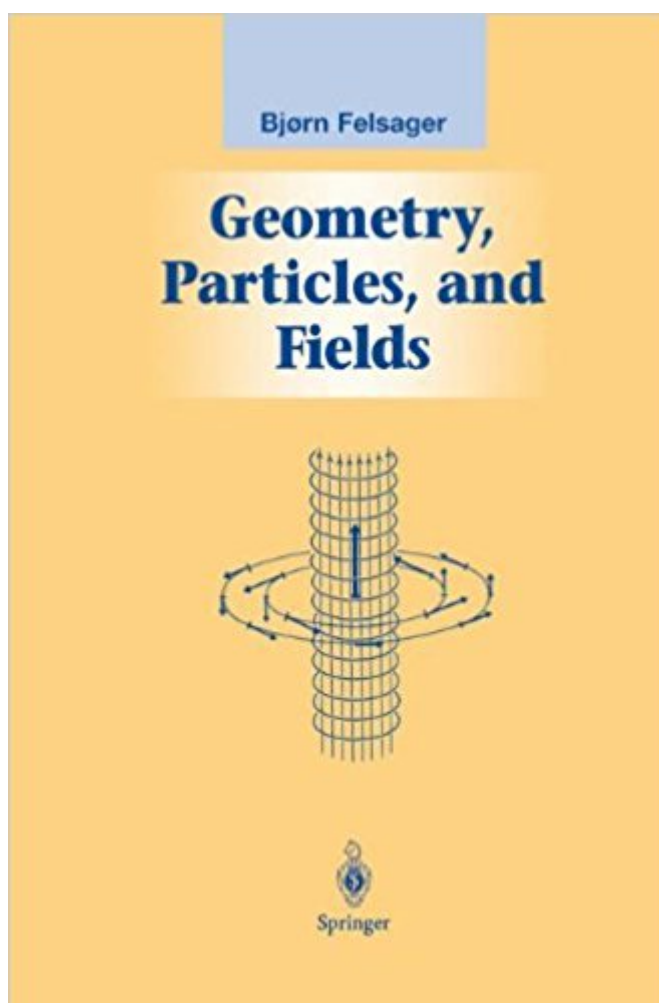


The book was found

Geometry, Particles, And Fields (Graduate Texts In Contemporary Physics)



Synopsis

Geometry, Particles and Fields is a direct reprint of the first edition. From a review of the first edition: "The present volume is a welcome edition to the growing number of books that develop geometrical language and use it to describe new developments in particle physics...It provides clear treatment that is accessible to graduate students with a knowledge of advanced calculus and of classical physics...The second half of the book deals with the principles of differential geometry and its applications, with a mathematical machinery of very wide range. Here clear line drawings and illustrations supplement the multitude of mathematical definitions. This section, in its clarity and pedagogy, is reminiscent of Gravitation by Charles Misner, Kip Thorne and John Wheeler...Felsager gives a very clear presentation of the use of geometric methods in particle physics...For those who have resisted learning this new language, his book provides a very good introduction as well as physical motivation. The inclusion of numerous exercises, worked out, renders the book useful for independent study also. I hope this book will be followed by others from authors with equal flair to provide a readable excursion into the next step." PHYSICS TODAY Bjoern Felsager is a high school teacher in Copenhagen. Educated at the Niels Bohr Institute, he has taught at the Universities of Copenhagen and Odense.

Book Information

Series: Graduate Texts in Contemporary Physics

Hardcover: 672 pages

Publisher: Springer (January 9, 1998)

Language: English

ISBN-10: 0387982671

ISBN-13: 978-0387982670

Product Dimensions: 6.1 x 1.6 x 9.2 inches

Shipping Weight: 2.4 pounds (View shipping rates and policies)

Average Customer Review: 5.0 out of 5 stars 2 customer reviews

Best Sellers Rank: #817,782 in Books (See Top 100 in Books) #126 in Books > Science & Math > Physics > Nuclear Physics > Particle Physics #163 in Books > Science & Math > Physics > Waves & Wave Mechanics #270 in Books > Science & Math > Physics > Solid-State Physics

Customer Reviews

FROM THE REVIEWS: MATHEMATICAL REVIEWS "It is particularly well-suited as an introductory text, since the author takes great care to anticipate points that may cause confusion" [The author

does a good job of focusing on the fundamentalsâ [[The first] part of the book works as either a self-contained introduction to classical field theory, or as a complement to a good text on classical electrodynamicsâ [[The second] part of the book is very clear and well plannedâ |works as a self-contained introduction to manifolds and differential forms, or, even better, as a compliment to a concise mathematics text.â • PHYSICS TODAY"The present volume is a welcome edition to the growing number of books that develop geometrical language and use it to describe new developments in particle physics ... It provides clear treatment that is accessible to graduate students with a knowledge of advanced calculus and of classical physics.... The second half of the book deals with the principles of differential geometry and its applications, with a mathematical machinery of very wide range. Here clear line drawings and illustrations supplement the multitude of mathematical definitions. This section, in its clarity and pedagogy, is reminiscent of Gravitation by Charles Misner, Kip Thorne and John Wheeler.... Felsager gives a very clear presentation of the use of geometric methods in particle physics.... For those who have resisted learning this new language, his book provides a very good introduction as well as physical motivation. The inclusion of numerous exercises, worked out, renders the book useful for independent study also. I hope this book will be followed by others from authors with equal flair to provide a readable excursion into the next step."

This book was originally published in Denmark in a typewritten form. I gives a very clear treatment of many aspects of modern theoretical physics on the advanced undergraduate or graduate level. Electromagnetism, gauge theories, path-integrals, differential geometry, and other central topics are treated with a minimum of unnecessary abstraction and a lot of examples and applications.

This text is extremely clear and direct. It offers a simple and expedient introduction to advanced topics with little prerequisites. Anyone with rudimentary knowledge of classical and quantum mechanics can follow the author's presentation with great ease. The organization of the text is completely appropriate and the exercises are totally relevant. The only advisement is to constantly remind oneself that the text is only on the topic of classical fields to the exclusion of any sections explicitly on quantum theory.

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

Geometry, Particles, and Fields (Graduate Texts in Contemporary Physics) Modern Geometry
 & Methods and Applications: Part I: The Geometry of Surfaces, Transformation Groups, and
 Fields (Graduate Texts in Mathematics) (Pt. 1) Particles and Nuclei: An Introduction to the Physical

Concepts (Graduate Texts in Physics) Physics of Atoms and Ions (Graduate Texts in Contemporary Physics) Calabi-Yau Varieties: Arithmetic, Geometry and Physics: Lecture Notes on Concentrated Graduate Courses (Fields Institute Monographs) Geometry, Topology and Physics, Second Edition (Graduate Student Series in Physics) Atoms, Molecules and Optical Physics 2: Molecules and Photons - Spectroscopy and Collisions (Graduate Texts in Physics) Atoms, Molecules and Optical Physics 1: Atoms and Spectroscopy (Graduate Texts in Physics) Particle Accelerator Physics (Graduate Texts in Physics) Laser Cooling and Trapping (Graduate Texts in Contemporary Physics) Conformal Field Theory (Graduate Texts in Contemporary Physics) Elementary Particles : The Building Blocks of the Universe - Physics and the Universe | Children's Physics Books Six Ideas That Shaped Physics: Unit Q - Particles Behave Like Waves (WCB Physics) The Great Design: Particles, Fields, and Creation Particles and Quantum Fields Differential Geometry: Connections, Curvature, and Characteristic Classes (Graduate Texts in Mathematics) Riemannian Holonomy Groups and Calibrated Geometry (Oxford Graduate Texts in Mathematics) Topology and Geometry (Graduate Texts in Mathematics) Commutative Algebra: with a View Toward Algebraic Geometry (Graduate Texts in Mathematics) Algebraic Geometry (Graduate Texts in Mathematics)

[Contact Us](#)

[DMCA](#)

[Privacy](#)

[FAQ & Help](#)