Electricity and Magnetism (Berkeley Physics Course, Vol. 2)

To Download this book in many format Visit :

https://wocoentala.org/source1/97a14c2828c62c5557415d891142d300

The sequence of topics covered include: electrostatics; steady currents; magnetic field; electromagnetic induction; and electric and magnetic polarization in matter. Taking a nontraditional approach, students focus on fundamental questions from different frames of reference. Each chapter has figures and problems to apply concepts studied.

Other Books

Weber's Electrodynamics, This volume is a substantially complete presentation of the electrodynamics developed by Wilhelm Weber. Weber's force between point charges is explored and thoroughly analysed. Ampère's force between current elements is discussed in connection with modern experiments relating to the Ampère versus Grassmann--Biot--Savart controversy. Ampère's force is a central feature of this work, as Maxwell maintained it should always be in the study of electrodynamics, although it is included in few textbooks on electromagnetism. A detailed study of this force is an outstanding feature of this book. Other topical questions of physics are analysed, such as a potential-dependent inertial mass, Mach's principle and the origin of inertia, action at a distance as opposed to contact actions, etc. No previous knowledge of the subject is required, and all topics are introduced with both their historical backgrounds as well as modern experimental evidence. This volume will appeal to physicists, mathematicians, electrical and electronic engineers, historians and philosophers of science.

2 2 2 2 . Chapter 3 / Weber's Electrodynamics 3.1. Wilhelm Weber and His Electromagnetic Researches In this chapter we present a short description of Weber's life and some of his experimental researches in electromagnetism."