

Classical Field Theory: Electromagnetism and Gravitation. John Wiley & Sons, 2008.

Francis E. Low. 9783527617463. 2008. 439 pages

The book describes Maxwell's equations first in their integral, directly testable form, then moves on to their local formulation. The first two chapters cover all essential properties of Maxwell's equations, including their symmetries and their covariance in a modern notation. Chapter 3 is devoted to Maxwell theory as a classical field theory and to solutions of the wave equation. Chapter 4 deals with important applications of Maxwell theory. The last chapter 6 gives a concise summary of semi-Riemannian geometry as the framework for the classical field theory of gravitation. The chapter concludes with a discussion of the Schwarzschild solution of Einstein's equations and the classical tests of general relativity (perihelion precession of Mercury, and light deflection by the sun). Unlike Kaluza-Klein theories, where the fifth coordinate appears in nondegenerate Riemannian or pseudo-Riemannian geometry, the theory based on semi-Riemannian geometry is free from defects of the former. In particular, scalar field does not... eLIBRARY ID: 11919156. The r.l. pimenov unified gravitation and electromagnetism field theory as semi-riemannian geometry. Gromov n.a.1. 1 Komi Science Centre, Ural Branch of the Russian Academy of Sciences, 24, Kommunisticheskaya street, Syktyvkar, 167982. A classical field theory is a physical theory that predicts how one or more physical fields interact with matter through field equations. The term 'classical field theory' is commonly reserved for describing those physical theories that describe electromagnetism and gravitation, two of the fundamental forces of nature. Theories that incorporate quantum mechanics are called quantum field theories. . Electromagnetic Field Interaction with Transmission Lines : From Classical Theory to HF Radiation field and wave electromagnetics cheng.pdf. 515 Pages 2003 59 MB 31,279 Downloads. . Electromagnetism. 2.1 Field theory (Physics) - A. I. Title. field and wave electromagnetics cheng Electromagnetic Field Theory: a problem solving approach. Electrical Engineering/Electromagnetics Methods for Electromagnetic Field Analysis A volume Electromagnetic Field Theory: A Problem Solving Approach. 753 Pages 2003 22.46 MB 7,022 Downloads New! Electromagnetic field theory is often the least popular course in the electrical engineering ... Get Top Trending Free Books in Your Inbox. Subscribe. What's the problem with this file?