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Abstract

The Course of Theoretical Physics is a ten-volume series of books that was initiated by Lev Landau and written in collaboration with his student Evgeny Lifshitz, starting in the late 1930s. Since then, the Course has enjoyed worldwide popularity. The hereby translated Volume 2 covers relativistic mechanics of particles, and classical field theory for fields, in particular special relativity and electromagnetism, general relativity and gravitation. It also includes sections on geometrical and wave optics. The fundamental equations are derived from the Principle of Least Action, enabling the attainment of maximum generality together with essential simplicity of presentation. Moreover, the book is self-contained with minimal prerequisites; the necessary tensor analysis is developed as the narrative goes along. In comparison to the original, we adopt the International System of Units (SI), and append various explanatory comments in the form of Translator's Notes. We sincerely hope that the current textbook will assist Greek university students and researchers in their acquaintance with one of the most elegant theories describing the natural world while generating pioneering experiments.



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