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内容概要

Neutrinos in Particle Physics, Astronomy and Cosmology provides a comprehensive and up-to-date introduction to neutrino physics, neutrino astronomy and neutrino cosmology. The intrinsic properties and fundamental interactions of neutrinos are described, as is the phenomenology of lepton flavor mixing, seesaw mechanisms and neutrino oscillations. The cosmic neutrino background, stellar neutrinos, supernova neutrinos and ultrahigh-energy cosmic neutrinos, together with the cosmological matter-antimatter asymmetry and other roles of massive neutrinos in cosmology, are discussed in detail. This book is intended for researchers and graduate students in the fields of particle physics, particle astrophysics and cosmology. Dr. Zhizhong Xing is a professor at the Institute of High Energy Physics, Chinese Academy of Sciences, China; Dr. Shun Zhou is currently a postdoctoral fellow at the Max Planck Institute for Physics, Germany.

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