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Sommario/riassunto

In physical cosmology, astronomy and celestial mechanics, dark energy is a hypothetical form of energy that permeates all of space and tends to increase the rate of expansion of the universe. Dark energy is the most popular way to explain recent observations and experiments that the universe appears to be expanding at an accelerating rate. In the standard model of cosmology, dark energy currently accounts for 74% of the total mass-energy of the universe. This book presents and discusses the nature and feasibility of laboratory registration using SQUID-magnetostrictor systems; a review on dark energy objects; the dark energy scale in superconductors; cosmic acceleration; a review of the quantum Yang-Mills condensate (YMC) dark energy model; and others.
