1. Record Nr. UNINA9910956502203321

Titolo	Dark energy : theories, developments and implications / / Karl Lefebvre and Raoul Garcia, editors
Pubbl/distr/stampa	Hauppauge, N.Y., : Nova Science Publishers, c2010
ISBN	1-61209-294-2
Edizione	[1st ed.]
Descrizione fisica	1 online resource (354 p.)
Collana	Space science, exploration and policies
Altri autori (Persone)	LefebvreKarl GarciaRaoul
Disciplina	523.1/8
Soggetti	Dark energy (Astronomy)
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Intro -- DARK ENERGY: THEORIES, DEVELOPMENTS AND IMPLICATIONS -- DARK ENERGY: THEORIES, DEVELOPMENTS AND IMPLICATIONS -- CONTENTS -- PREFACE -- Chapter 1DARK ENERGY: THE NATURE AND FEASIBILITYOF LABORATORY REGISTRATION USINGSQUID-MAGNETOSTRICTOR SYSTEM -- Abstract -- 1. Introduction: Physical Prerequisites to the Appearance of DarkEnergy Concept -- 2. SQUID/Magnetostrictor System as a Sensor of SuperweakPressure Variations -- 3. Physical Bases of Magnetostriction and Criteria of the OptimumTrial-body Choice in the SQUID/Magnetostrictor System -- References -- Chapter2AREVIEWONDARKENERGYOBJECTS -- Abstract -- 1.Introduction -- 2. GravastarsCanExistbutTheyDoNotExcludetheExistenceofBlackHoles -- 3.TheConnectionbetweenAccelerationoftheUniverseandStar-BlackHoleFormation -- 4.Conclusion -- References -- Chapter3THEDARKENERGYSCALEINSUPERCONDUCTORS: INNOVATIVETHEORETICALANDEXPERIMENTALCONCEPTS -- Abstract -- 1.Introduction -- 2. InverseCosmologicalConstantProblemandtheUncertaintyPrinciple -- 3. ThePlanck-EinsteinScale -- 4.ScaleTransformationinSuperconductors -- 4.1.CutoffforVacuumFluctuationsinSuperconductors -- 4.2. FormationofTaoBalls -- 4.3.FundamentalSpace-TimeUncertaintyinaRadioactiveSuperconductor -- 4.4. UncertaintyPrincipleandNon-classicalInertiainSuperconductors -- 5.

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.