

1. Record Nr.	UNINA9910257446403321
Titolo	The Physical Universe: The Interface Between Cosmology, Astrophysics and Particle Physics [[electronic resource]] : Proceedings of the XII Autumn School of Physics Held at Lisbon, Portugal, 1–5 October 1990 / / edited by John D. Barrow, Alfredo B. Henriques, Maria T.V.T. Lago, Malcom S. Longair
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 1991
ISBN	3-540-47544-3
Edizione	[1st ed. 1991.]
Descrizione fisica	1 online resource (VIII, 312 p. 12 illus.)
Collana	Lecture Notes in Physics, , 0075-8450 ; ; 383
Disciplina	530.1
Soggetti	Gravitation Elementary particles (Physics) Quantum field theory Observations, Astronomical Astronomy—Observations Astrophysics Geophysics Classical and Quantum Gravitation, Relativity Theory Elementary Particles, Quantum Field Theory Astronomy, Observations and Techniques Astrophysics and Astroparticles Geophysics/Geodesy
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di contenuto	Gravitation and hot big-bang cosmology -- Euclideanized Einstein-Yang-Mills equations, wormholes and the ground-state wave function of a radiation dominated Universe -- Experiments with neutrinos -- Topological defects in the early universe -- The space telescope and the problems of cosmology -- Self-gravitating magnetic monopoles, global monopoles and black holes -- Understanding large-scale cosmic structure -- Metric space as a model of spacetime: Classical theory and

quantization -- Galaxy formation — An update -- The hypothesis of the expansion of the universe and the global tests -- The early universe behaviour with non-minimal coupling -- Stability of compactification in Einstein-Yang-Mills theories -- Multivariate analysis and pattern recognition methods: A short review and some current directions -- Cooling of neutron stars -- Experiments in high energy physics: A brief introduction -- Nucleosynthesis in big-bang models -- The cosmological constant, third quantization and all that -- Structure of the inflationary universe.

Sommario/riassunto

Meant as a review for students of astrophysics and particle physics, this book contains a selection of survey articles and seminar reports on "high energy cosmology". Included are contributions on topics ranging from classical cosmology, large scale structure, and primordial nucleosynthesis to quantum cosmology, covering both the theoretical aspects and the most important observations.
