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Nota di contenuto	J. Alcaniz et al. Measuring baryon acoustic oscillations with angular two-point correlation function -- C. M. Boily Resonant disruption of binary stars by a catalytic black hole -- Rong-Gen Cai and Li-Ming Cao Mechanics of Apparent Horizon in Two Dimensional Dilaton Gravity -- Sumanta Chakraborty Boundary Terms of the Einstein-Hilbert Action -- Timothy Clifton and John Barrow Decay of the Cosmic Vacuum Energy -- Naresh Dadhich Understanding General Relativity after 100 years: A matter of perspective -- Tevian Dray Piecewise Conserved Quantities -- Pankaj Joshi Self-Similarity and Criticality in Gravitational Collapse -- Claus Kiefer Notes on semiclassical Weyl gravity -- Dawood Kothawala Accelerated Observers, Thermal Entropy, and Spacetime Curvature -- Donald Lynden-Bell A local stress tensor for gravity Fields -- Michele

Maggiore Nonlocal Infrared Modifications of Gravity: A Review -- Ayan Mukhopadhyay Emergence of gravity and RG flow -- S. Modak Modelling non-paradoxical loss of information in black hole evaporation -- J.V. Narlikar Relativistic Paths : A Feynman Problem -- Martin Rees Thoughts on 50 years in astrophysics and cosmology and on what comes next -- Sudipta Sarkar Area Theorem: General Relativity and Beyond -- Shankar Narayanan What Are the Atoms of Space Time? -- Suprit Singh From Quantum to Classical in the Sky -- T.P. Singh Classical and quantum: a conflict of interest -- Lee Smolin Four principles for quantum gravity -- L. Sriramkumar What do detectors detect? -- Urjit A Yajnik Stability longevity and all that : false vacua and topological defects.

Sommario/riassunto

This book provides a compilation of in-depth articles and reviews on key topics within gravitation, cosmology and related issues. It is a celebratory volume dedicated to Prof. Thanu Padmanabhan ("Paddy"), the renowned relativist and cosmologist from IUCAA, India, on the occasion of his 60th birthday. The authors, many of them leaders of their fields, are all colleagues, collaborators and former students of Paddy, who have worked with him over a research career spanning more than four decades. Paddy is a scientist of diverse interests, who attaches great importance to teaching. With this in mind, the aim of this compilation is to provide an accessible pedagogic introduction to, and overview of, various important topics in cosmology, gravitation and astrophysics. As such it will be an invaluable resource for scientists, graduate students and also advanced undergraduates seeking to broaden their horizons.
