

1. Record Nr.	UNINA9910437983503321
Autore	Straumann Norbert
Titolo	General Relativity // by Norbert Straumann
Pubbl/distr/stampa	Dordrecht : , : Springer Netherlands : , : Imprint : Springer, , 2013
ISBN	94-007-5410-8
Edizione	[2nd ed. 2013.]
Descrizione fisica	1 online resource (741 p.)
Collana	Graduate Texts in Physics, , 1868-4513
Disciplina	530.11
Soggetti	Gravitation Astronomy Astrophysics Mathematical physics Physics Classical and Quantum Gravitation, Relativity Theory Astronomy, Astrophysics and Cosmology Mathematical Physics History and Philosophical Foundations of Physics
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	From the Contents: Part I The General Theory of Relativity -- Introduction -- Physics in External Gravitational Fields -- Einstein's Field Equations -- Part II Applications of General Relativity -- The Schwarzschild Solution and Classical Tests of General Relativity.- Weak Gravitational Fields -- The Post-Newtonian Approximation -- White Dwarfs and Neutron Stars -- Black Holes -- The Positive Mass Theorem -- Essentials of Friedmann-Lemaître Models -- Part III Differential Geometry -- Differentiable Manifolds -- Tangent Vectors, Vector and Tensor Fields -- The Lie Derivative -- Differential Forms -- Affine Connections -- Some Details and Supplements.
Sommario/riassunto	This book provides a completely revised and expanded version of the previous classic edition 'General Relativity and Relativistic Astrophysics'. In Part I the foundations of general relativity are thoroughly developed, while Part II is devoted to tests of general relativity and many of its applications. Binary pulsars – our best

laboratories for general relativity – are studied in considerable detail. An introduction to gravitational lensing theory is included as well, so as to make the current literature on the subject accessible to readers. Considerable attention is devoted to the study of compact objects, especially to black holes. This includes a detailed derivation of the Kerr solution, Israel's proof of his uniqueness theorem, and a derivation of the basic laws of black hole physics. Part II ends with Witten's proof of the positive energy theorem, which is presented in detail, together with the required tools on spin structures and spinor analysis. In Part III, all of the differential geometric tools required are developed in detail. A great deal of effort went into refining and improving the text for the new edition. New material has been added, including a chapter on cosmology. The book addresses undergraduate and graduate students in physics, astrophysics and mathematics. It utilizes a very well structured approach, which should help it continue to be a standard work for a modern treatment of gravitational physics. The clear presentation of differential geometry also makes it useful for work on string theory and other fields of physics, classical as well as quantum.

2. Record Nr.	UNINA9910557788603321
Autore	Pace Bernardo
Titolo	Innovative Preservation Technology for the Fresh Fruit and Vegetables
Pubbl/distr/stampa	Basel, Switzerland, : MDPI - Multidisciplinary Digital Publishing Institute, 2021
Descrizione fisica	1 online resource (132 p.)
Soggetti	Biology, life sciences Research & information: general Technology, engineering, agriculture
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia

The preservation of freshness of fruits and vegetables until their consumption is the aim of many research activities. The quality losses of fresh fruit and vegetables during cold chain are frequently attributable to an inappropriate use of postharvest technologies. Moreover, especially when fresh produce is transported to distant markets, it is necessary to adopt proper storage solutions in order to preserve the initial quality. Nowadays, for each step of the supply chain (packing house, cold storage rooms, precooling center, refrigerate transport, and distribution), innovative preservation technologies are available that, alone or in combination, could preserve the fresh products in order to maintain the principal quality and nutritional characteristics. In this Special Issue, these preservation technologies will be described, highlighting their effect on quality maintenance.
