

1. Record Nr.	UNINA9910140973203321
Autore	DeWitt Bryce
Titolo	Bryce DeWitt's Lectures on Gravitation : Edited by Steven M. Christensen // by Bryce DeWitt ; edited by Steven M. Christensen
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2011
ISBN	3-540-36911-2
Edizione	[1st ed. 2011.]
Descrizione fisica	1 online resource (XII, 288 p. 10 illus.)
Collana	Lecture Notes in Physics, , 0075-8450 ; ; 826
Disciplina	521/.1
Soggetti	Gravitation Physics Differential geometry Classical and Quantum Gravitation, Relativity Theory Mathematical Methods in Physics Differential Geometry
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di contenuto	Review of the Uses of Invariants in Special Relativity -- Accelerated Motion in Special Relativity -- Realization of Continuous Groups -- Riemannian Manifolds -- The Free Particle Geodesics -- Weak Field Approximation. Newton`s Theory -- Ensembles of Particles -- Production of Gravitational Fields by Matter -- Conservation Laws -- Phenomenological Description of a Conservative Continuous Medium -- Solubility of the Einstein and Matter Equations -- Energy, Momentum and Stress in the Gravitational Field -- Measurement of Asymptotic Field -- The Electromagnetic Field -- Gravitational Waves -- Spinning Bodies -- Weak Field Gravitational Wave -- Stationary Spherically (or Rotationally) Symmetric Metric -- Kerr Metric Subcalculations -- Friedmann Cosmology -- Dynamical Equations and Diffeomorphisms.
Sommario/riassunto	Bryce DeWitt, a student of Nobel Laureate Julian Schwinger, was himself one of the towering figures in 20th century physics, particularly renowned for his seminal contributions to quantum field theory, numerical relativity and quantum gravity. In late 1971 DeWitt gave a course on gravitation at Stanford University, leaving almost 400 pages

of detailed handwritten notes. Written with clarity and authority, and edited by his former student Steven Christensen, these timeless lecture notes, containing material or expositions not found in any other textbooks, are a gem to be discovered or re-discovered by anyone seriously interested in the study of gravitational physics.
