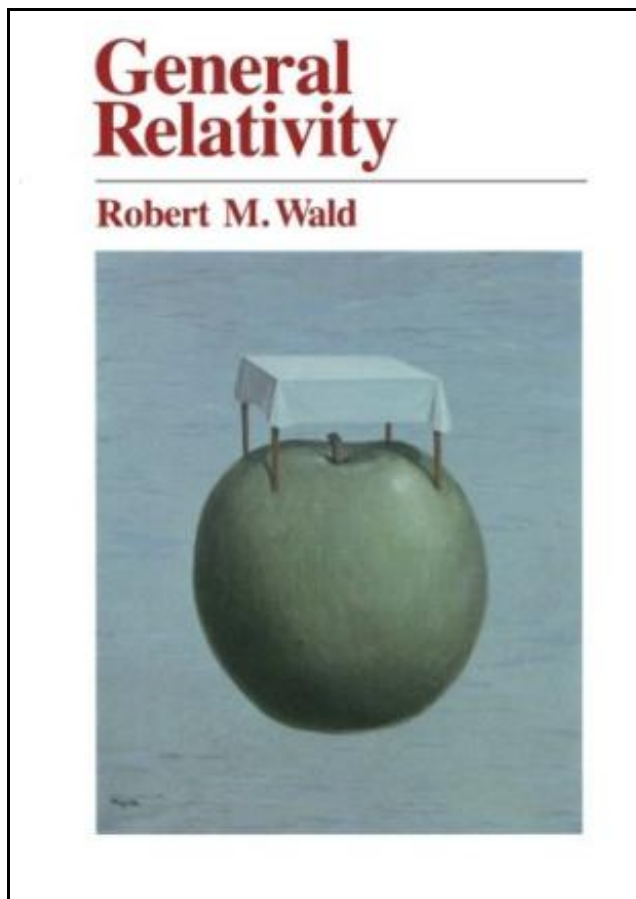


## General Relativity



Filesize: 6.51 MB

### ***Reviews***

*This is actually the greatest publication i have go through right up until now. I really could comprehended every little thing using this composed e book. I realized this book from my i and dad advised this ebook to learn.*  
***(Jimmie Schmidt I)***

## GENERAL RELATIVITY



University Of Chicago Press, 1984. Book Condition: New. Brand New, Unread Copy in Perfect Condition. A+ Customer Service! Summary: PrefaceNotation and ConventionsPART I. FUNDAMENTALS1. Introduction1.1 Introduction1.2 Space and Time in Prerelativity Physics and in Special Relativity1.3 The Spacetime Metric1.4 General Relativity2. Manifolds and Tensor Fields2.1 Manifolds2.2 Vectors2.3 Tensors; the Metric Tensor2.4 The Abstract Index Notation3. Curvature3.1 Derivative Operators and Parallel Transport3.2 Curvature3.3 Geodesics3.4 Methods for Computing Curvature4. Einstein's Equation4.1 The Geometry of Space in Prerelativity Physics; General and Special Covariance4.2 Special Relativity4.3 General Relativity4.4 Linearized Gravity: The Newtonian Limit and Gravitational Radiation5. Homogeneous, Isotropic Cosmology5.1 Homogeneity and Isotropy5.2 Dynamics of a Homogeneous, Isotropic Universe5.3 The Cosmological Redshift; Horizons5.4 The Evolution of Our Universe6. The Schwarzschild Solution6.1 Derivation of the Schwarzschild Solution6.2 Interior Solutions6.3 Geodesics of Schwarzschild: Gravitation Redshift, Perihelion Precession, Bending of Light, and Time Delay6.4 The Kruskal ExtensionPART II. ADVANCED TOPICS7. Methods for Solving Einstein's Equation7.1 Stationary, Axisymmetric Solutions7.2 Spatially Homogeneous Cosmologies7.3 Algebraically Special Solutions7.4 Methods for Generating Solutions7.5 Perturbations8. Casual Structure8.1 Futures and Pasts: Basic Definitions and Results8.2 Causality Conditions8.3 Domains of Dependence; Global Hyperbolicity9. Singularities9.1 What is a Singularity?9.2 Timelike and Null Geodesic Congruences9.3 Conjugate Points9.4 Existence of Maximum Length Curves9.5 Singularity Theorems10. The Initial Value Formulation10.1 Initial Value Formulation for Particles and Fields10.2 Initial Value Formulation of General Relativity11. Asymptotic Flatness11.1 Conformal Infinity11.2 Energy12. Black Holes12.1 Black Holes and the Cosmic Censor Conjecture12.2 General Properties of Black Holes12.3 The Charged Kerr Black Holes12.4 Energy Extraction from Black Holes12.5 Black Holes and Thermodynamics13. Spinors13.1 Spinors in Minkowski Spacetime13.2 Spinors in Curved Spacetime14. Quantum Effects in Strong Gravitational Fields14.1 Quantum Gravity14.2 Quantum Fields in Curved Spacetime14.3 Particle Creation near Black Holes14.4 Black Hold ThermodynamicsAPPENDICESA. Topological SpacesB. Differential Forms, Integration, and Frobenius's TheoremB.1 Differential FormsB.2 IntegrationB.3 Frobenius's TheoremC. Maps of Manifolds, Lie Derivatives, and Killing FieldsC.1 Maps of ManifoldsC.2...



[Read General Relativity Online](#)



[Download PDF General Relativity](#)

## Other eBooks



### **Grandpa Spanielson's Chicken Pox Stories: Story #1: The Octopus (I Can Read Book 2)**

HarperCollins, 2005. Book Condition: New. Brand New, Unread Copy in Perfect Condition. A+ Customer Service! Summary: Foreword by Raph Koster. Introduction. I. EXECUTIVE CONSIDERATIONS. 1. The Market. Do We Enter the Market? Basic Considerations. How...

[Download Book »](#)



### **Star Flights Bedtime Spaceship: Journey Through Space While Drifting Off to Sleep**

CreateSpace Independent Publishing Platform, 2013. Book Condition: New. Brand New, Unread Copy in Perfect Condition. A+ Customer Service! Summary: "Star Flights Bedtime Spaceship" is a charming and fun story with the purpose to help children...

[Download Book »](#)



### **The Web Collection Revealed, Premium Edition: Adobe Dreamweaver CS6, Flash CS6, and Photoshop CS6 (Stay Current with Adobe Creative Cloud)**

Cengage Learning, 2012. Book Condition: New. Brand New, Unread Copy in Perfect Condition. A+ Customer Service! Summary: You can now maximize and integrate the design and development power of Adobe Creative Suite 6 with WEB...

[Download Book »](#)



### **TJ new concept of the Preschool Quality Education Engineering the daily learning book of: new happy learning young children (2-4 years old) in small classes (3)(Chinese Edition)**

paperback. Book Condition: New. Ship out in 2 business day, And Fast shipping, Free Tracking number will be provided after the shipment. Paperback. Pub Date :2005-09-01 Publisher: Chinese children before making Reading: All books are the...

[Download Book »](#)



### **TJ new concept of the Preschool Quality Education Engineering the daily learning book of: new happy learning young children (3-5 years) Intermediate (3)(Chinese Edition)**

paperback. Book Condition: New. Ship out in 2 business day, And Fast shipping, Free Tracking number will be provided after the shipment. Paperback. Pub Date :2005-09-01 Publisher: Chinese children before making Reading: All books are the...

[Download Book »](#)