Steven Weinberg


DESCRIPTION

A leading physicist delves into relativity and experimental applications

*Gravitation and Cosmology: Principles and Applications of the General Theory of Relativity* offers a Nobel laureate's perspectives on the wealth of data technological developments have brought to expand upon Einstein's theory. Unique in basing relativity on the Principle of Equivalence of Gravitation and Inertia over Riemannian geometry, this book explores relativity experiments and observational cosmology to provide a sound foundation upon which analyses can be made. Covering special and general relativity, tensor analysis, gravitation, curvature, and more, this book provides an engaging, insightful introduction to the forces that shape the universe.

ABOUT THE AUTHOR

Steven Weinberg ForMemRS is an American theoretical physicist and Nobel laureate in Physics for his contributions with Abdus Salam and Sheldon Glashow to the unification of the weak force and electromagnetic interaction between elementary particles.
Gravitation and Cosmology: Principles and Applications of the General Theory of Relativity. Steven Weinberg. The beauty of general relativity (GR) lies in the connection it provides between geometry and physics. Weinberg's algebraic approach completely obscures this connection. Instead Weinberg teaches how to crank through complex calculations without any insight or geometric intuition. Having been published in 1972, the book lacks modern examples in cosmology and quantum gravity. It also lacks a proper introduction to differential geometry and makes no mention of topology or other mathematical ideas prevalent in current GR research. In the 35 years since its publication, it has been surpassed by many much better books.
General relativity generalizes special relativity and refines Newton's law of universal gravitation, providing a unified description of gravity as a geometric property of space and time, or spacetime. In particular, the curvature of spacetime is directly related to the energy and...
Steven Weinberg. The beauty of general relativity (GR) lies in the connection it provides between geometry and physics. Weinberg's algebraic approach completely obscures this connection. Instead Weinberg teaches how to crank through complex calculations without any insight or geometric intuition. Having been published in 1972, the book lacks modern examples in cosmology and quantum gravity. It also lacks a proper introduction to differential geometry and makes no mention of topology or other mathematical ideas prevalent in current GR research. In the 35 years since its publication, it has been surpassed by many much better books.
For 23 years this has been my dream: for a generation of learners who turn to their screens for answers, I want to put the very best information at their fingertips. We stand with Wikipedians, librarians and creators to provide enduring access to the world’s most trustworthy knowledge. We’re dedicated to reader privacy so we never track you. We don’t accept ads. Principles And Applications Of The General Theory Of Relativity (Wiley, 1972) (ISBN 0471925675) (685s). Item Preview. remove-circle. You can write a book review and share your experiences. Other readers will always be interested in your opinion of the books you've read. Whether you've loved the book or not, if you give your honest and detailed thoughts then people will find new books that are right for them. 1. Gravity gauge theories and geometric algebra. Chris Doran. Д“Д·Н·Д°: English. File: PDF, 1.26 MB. 2.