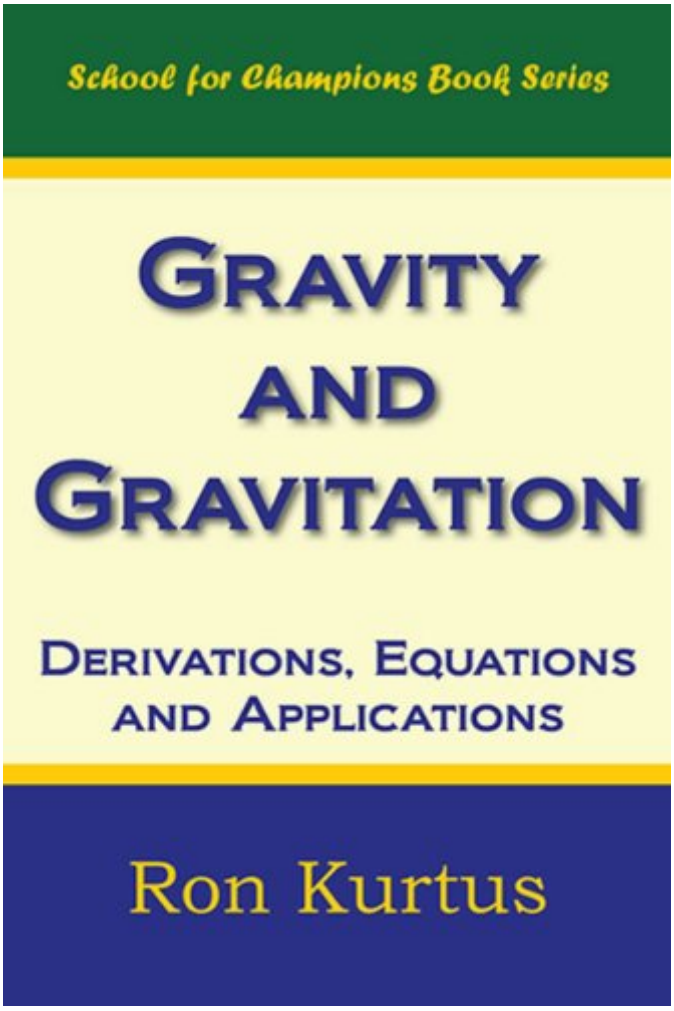
Gravity And Gravitation: Derivations, Equations And Applications



Synopsis

Gravity and Gravitation is a physics book written in a form that is easy to understand for high school and college students, as well as science buffs. It is based on lessons from the School for Champions educational website.The book explains the principles of gravity and gravitation, shows derivations of important gravity equations and provides applications of those equations. It also compares the different theories of gravitation, from those of Newton to Einstein to present-day concepts.

Book Information

File Size: 1469 KB

Print Length: 534 pages

Page Numbers Source ISBN: 0976798158

Simultaneous Device Usage: Unlimited

Publisher: SfC Publishing Co. (June 15, 2011)

Publication Date: June 15, 2011

Sold by:Â Digital Services LLC

Language: English

ASIN: B0058I6YTA

Text-to-Speech: Enabled

X-Ray: Not Enabled

Word Wise: Enabled

Lending: Not Enabled

Enhanced Typesetting: Enabled

Best Sellers Rank: #905,464 Paid in Kindle Store (See Top 100 Paid in Kindle Store) #71 inÂ Kindle Store > Kindle eBooks > Nonfiction > Science > Physics > Gravity #206 inÂ Books > Science & Math > Physics > Gravity #520 inÂ Kindle Store > Kindle eBooks > Nonfiction > Science > Astronomy & Space Science > Astrophysics & Space Science

Customer Reviews

I bought this book because of Mr. Kurtis’s excellent teaching methods exemplified on his websites. However in using his book as a physics reference I come across the same mistaken reasoning that has plagued physics to this day; the idea that ALL `balls’ fall to the Earth at the same time if dropped from the same height.One can certainly understand Galileo’s mistake in not accounting for the fact that the mass of any objects dropped is negligible as compared to the Earth, or the Moon for that

matter. But why does the mistaken reasoning continue to this day? Could it be Einstein's logical fallacy of developing GR `assuming' this was the case? Science removed from metaphysics and logic should always be viewed with skepticism IMHO.Let's do 2 experiments and compare the results. We'll do first one experiment, then the other one. We won't drop our `balls' to the Earth at the same time.Take a ball with a mass of 1.8986ÃƒÂ—1027 kg [mass of Jupiter] and hold it 5 miles from its surface to the surface of the Earth. Calculate the time of fall, after the ball is released, such that the surface of the ball and the surface of the Earth make contact. Ignore any effects of atmosphere.Now take a ball with a mass of 1 kg and hold it 5 miles from its surface to the surface of the Earth. Calculate the time of fall, after the ball is released, such that the surface of the ball and the surface of the Earth make contact. Ignore any effects of atmosphere.Common Physics texts, Mr. Kurtus's book, and our most revered institutions such as NASA will tell you the Force of gravity is equal to:Force = mass1 times mass2 divided by the radius distance between the cm of the objects all times G the gravitational constant.

Seems: The Elusive Structure of the Universe and the Journey to Quantum Gravity Defying Gravity: Improve your vertical jump and more for volleyball The Generous Church: A Guide for Pastors (Defying Gravity) Gravity (Hollywood Connections Book 1)