Relativity: A Very Short Introduction

By Russell Stannard

Reviewed by Michalis Hadjimarcou, Cyprus

elativity is, admittedly, a difficult subject to understand, even to science-oriented people. In Relativity: A Very Short Introduction, Russell Stannard has made an effort to explain relativity and its implications for the laws that govern the Universe in a way that can be understood by those with at least some basic knowledge of physics. The book is rich in scientific terminology, so a good knowledge of English is essential to understand it. Stannard has also included a wealth of diagrams and mathematical equations. These can make the book more difficult to understand if the reader is not adequately trained in dealing with such information. But, there is an alternative solution: ignore most of the diagrams and formulas and concentrate only on the basic ideas presented. Such casual reading will allow the reader to filter out all the explanatory details and keep the basic description of what relativity is all about. Of course, if one is determined to capture the full extent of relativity, this book provides an excellent opportunity for achieving this.

Regardless of the background and scope of the reader, he / she will be rewarded in the last chapters of the book with information on exciting subjects, the type favoured by science fiction. The Big Bang, black holes,

worm holes, supernovas, the expanding Universe, dark energy and dark matter are but a few of such issues Stannard has elaborated on and enables the reader to distinguish between science and imagination.

In school, there are a number of ways in which this book can be useful, especially in an advanced physics or astronomy class. Considering that the theory of relativity is taught in secondary schools across the world, teachers can use the book to draw basic information on the theory itself, but more importantly, to inform themselves and their students on the latest theories regarding the nature and the peculiarities of the Universe. Students might find it very difficult to read and understand the entire book, but if they concentrate on specific sections of the book, with a little help from their physics teacher, they will be able to benefit greatly from it. Along those lines, the teacher could assign projects to his students that would require more careful study of specific sections of the book.

The book is also available in a German translation.

Details

Publisher: Oxford University Press Publication year: 2008 ISBN: 9780199236220







To learn how to use this code, seewww.scienceinschool.org/help#QR

Science in School | Issue 18: Spring 2011 www.scienceinschool.org