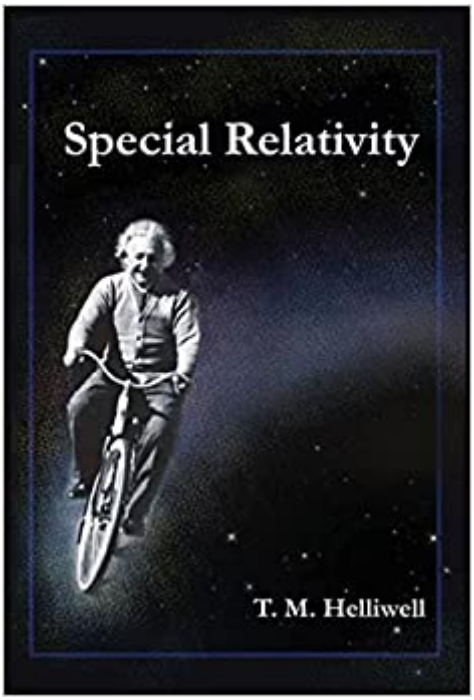
Special Relativity



Synopsis

Explores the 20th century revolutions in physics. This title helps readers to build up physical intuition for what is going on, before presenting mathematical descriptions. It contains many applications, ten appendices, and numerous illustrations, examples and problems.

Book Information

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Customer Reviews

Einstein’s Special Theory of Relativity is a superb place to begin a serious study of physics. --SciTech Book NewsJudging from his book, Helliwell must be a fine teacher. He achieves a rare clarity. For instance, the derivation of the standard kinematic results starting from Einstein s postulates is outstandingly clear. Throughout, he shows an unusual and sympathetic appreciation of the problems faced by the beginning student. --John Taylor, University of ColoradoHelliwell’s book strikes a tone that will be very effective with a wide population of students. The writing is very accessible and conveys excitement and engagement. The problems are abundant, and students will enormously appreciate the carefully worked examples throughout. This text chooses a middle road and has a practical flavor that is often obscured in other books. --Louis Buchholtz, California State University at Chico

THOMAS M. HELLIWELL is Burton Bettingen Professor of Physics, Emeritus, at Harvey Mudd College, USA. He received his B.A. from Pomona College, USA and his Ph.D. at Caltech, USA, where his thesis was on atomic physics and quantum mechanics. He has published more than 40 research papers, many with undergraduate coauthors, in quantum mechanics and general relativity. He has taught a wide variety of undergraduate courses, from beginning to advanced, in classical

mechanics, special and general relativity, quantum mechanics, statistical mechanics, and electromagnetism. He has also served as director of the freshman division, chair of the physics department, chair of the faculty, and dean of faculty.

This is still my favorite physics text. If you don’t know about Robespierre the radical rhino then you need to read this book!Also don’t be intimidated by the title. If you have a solid algebra background then you are set math wise. If you are just reading it for fun you will learn so much without even touching the math.

I used this book for an intro class in modern physics. Really clear and enjoyable read. I think the subject in general uses very basic math, which was surprising. After completing the book, I felt it gave me an intuitive grasp on the subject material. I can see someone using this book for self-study.

This is a pretty good treatment of special relativity that we used in my physics class at Caltech. For the most part, it makes sense and provides good examples and exercises. The only issue is that it is a little short on its coverage of spacetime diagrams.

Great book for an introduction. Very concise and to the point. Everything is very well explained and derived from Einsteins basic axioms. Plus it has a picture of Einstein on a bike.

This is an excellent explanation of Special Relativity. It includes a detailed explanation of how one expanding sphere of light is seen from more than one frame of reference.

very good book.

It is one of the best books on the subject, in my opinion. It is vey didatic. I recommend it.

Well written book with helpful and occasionally hilarious problems.

The Road to Relativity: The History and Meaning of Einstein’s "The Foundation of General Relativity", Featuring the Original Manuscript of Einstein’s Masterpiece Theory of Relativity for the Rest of Us but not for Dummies: Theory of Relativity Simplified Relativity: The Special and the General Theory Space and Time in Special Relativity Relativity; the Special and General Theory

Transformations Of Coordinates, Vectors, Matrices And Tensors Part I: LAGRANGEÃ¢â ¬â„¢S EQUATIONS, HAMILTONÃ¢â ¬â„¢S EQUATIONS, SPECIAL THEORY OF RELATIVITY AND CALCULUS ... Mathematics From 0 And 1 Book 16) Relativity: The Special and General Theory [New Edition with Readable Equations] Relativity: The Special and the General Theory, 100th Anniversary Edition From Special Relativity to Feynman Diagrams: A Course in Theoretical Particle Physics for Beginners (UNITEXT for Physics) Theoretical Physics 4: Special Theory of Relativity Newton to Einstein: The Trail of Light: An Excursion to the Wave-Particle Duality and the Special Theory of Relativity Special Relativity Special Relativity: For the Enthusiastic Beginner Special Relativity (M.I.T. Introductory Physics) Introduction to Special Relativity Relativity: The Special and General Theory [Illustrated] Knife Fighting, Knife Throwing for Combat (Special Forces/Ranger-Udt/Seal Hand-To-Hand Combat/Special W) Drama Education & Special Needs: A Handbook for Teachers in Mainstream & Special Schools Fundamentals of Special Radiographic Procedures, 5e (Snopek, Fundamentals of Special Radiographic Procedures) Ripley's Special Edition 2016 (Ripley's Believe It Or Not Special Edition)