

Special Relativity: For the Enthusiastic Beginner is written for high school and college students learning about special relativity for the first time. It will appeal to the reader who has a healthy level of enthusiasm for understanding how and why the various results of special relativity come about.

All of the standard introductory topics in special relativity are covered: historical motivation, loss of simultaneity, time dilation, length contraction, velocity addition, Lorentz transformations, Minkowski diagrams, causality, Doppler effect, energy/momentum, collisions/decays, force, and 4-vectors. Additionally, the last chapter provides a brief introduction to the basic ideas of general relativity, including the equivalence principle, gravitational time dilation, and accelerating reference frames.

- Features more than 100 worked-out problems in the form of examples in the text and solved problems at the end of each chapter.
- Includes 175 figures to help illustrate important concepts.
- Frequently provides helpful supplementary remarks that are separated off from the main text.
- Contains an appendix with nearly 50 qualitative questions and answers, to help students guard against common misconceptions.
- A valuable resource in any introductory course on special relativity, either as the main text or as a supplement.

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