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		3.3.1 Time dilation3.3.2 Length contraction; 3.4 Addition of velocities; 3.5 Causality relations; 3.6 Aberration and Doppler effect; 3.6.1 Aberration; 3.6.2 Doppler effect; 3.7 Length contraction and visual appearance; 3.8 Mass, momentum, and kinetic energy; 3.9 Probably the most famous formula in all of physics; 3.10 Electrodynamics: Invariance of Maxwell's equations; 4 Further consequences and applications of Special Relativity; 4.1 Atomic physics; 4.2 Nuclear physics; 4.3 Elementary particle physics; 4.4 Daily physics: navigational systems;

| Sommario/riassunto | Special relativity provides the foundations of our knowledge of space and time. Without it, our understanding of the world, and its place in the universe, would be unthinkable. This book gives a concise, elementary, yet exceptionally modern, introduction to special relativity. It is a gentle yet serious 'first encounter', in that it conveys a true understanding rather than purely reports the basic facts. Only very elementary mathematical knowledge is needed to master it (basichigh-school maths), yet it will leave the reader with a sound understanding of the subject. Special Relativity: A First |