

## CHAPTER OVERVIEW

### 5: Relativity

The theory of relativity led to a profound change in the way we perceive space and time. The “common sense” rules that we use to relate space and time measurements in the Newtonian worldview differ seriously from the correct rules at speeds near the speed of light. Unlike Newtonian mechanics, which describes the motion of particles, or [Maxwell's equations](#), which specify how the electromagnetic field behaves, special relativity is not restricted to a particular type of phenomenon. Instead, its rules on space and time affect all fundamental physical theories.

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Thumbnail: The light cone consists of all the world lines followed by light from the event A at the vertex of the cone. (CC BY 4.0; OpenStax)

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