

CHAPTER OVERVIEW

17: Relativistic Mechanics

- [17.1: Introduction to Relativistic Mechanics](#)
- [17.2: Galilean Invariance](#)
- [17.3: Special Theory of Relativity](#)
- [17.4: Relativistic Kinematics](#)
- [17.5: Geometry of Space-time](#)
- [17.6: Lorentz-Invariant Formulation of Lagrangian Mechanics](#)
- [17.7: Lorentz-invariant formulations of Hamiltonian Mechanics](#)
- [17.8: The General Theory of Relativity](#)
- [17.9: Implications of Relativistic Theory to Classical Mechanics](#)
- [17.E: Relativistic Mechanics \(Exercises\)](#)
- [17.S: Relativistic Mechanics \(Summary\)](#)

Thumbnail: Momenta are conserved within a closed system and the laws of conservation of momenta applies. Consider the special case of identical particles colliding symmetrically. (CC BY-SA; [RobinH](#) via [Wikipedia](#))

This page titled [17: Relativistic Mechanics](#) is shared under a [CC BY-NC-SA 4.0](#) license and was authored, remixed, and/or curated by [Douglas Cline](#) via [source content](#) that was edited to the style and standards of the LibreTexts platform.