

CHAPTER OVERVIEW

10: Nuclear Physics

In this chapter, we study the composition and properties of the atomic nucleus. The nucleus lies at the center of an atom, and consists of protons and neutrons. A deep understanding of the nucleus leads to numerous valuable technologies, including devices to date ancient rocks, map the galactic arms of the Milky Way, and generate electrical power.

[10.1: Prelude to Nuclear Physics](#)

[10.2: Properties of Nuclei](#)

[10.3: Nuclear Binding Energy](#)

[10.4: Radioactive Decay](#)

[10.5: Nuclear Reactions](#)

[10.6: Fission](#)

[10.7: Nuclear Fusion](#)

[10.8: Medical Applications and Biological Effects of Nuclear Radiation](#)

[10.A: Nuclear Physics \(Answers\)](#)

[10.E: Nuclear Physics \(Exercises\)](#)

[10.S: Nuclear Physics \(Summary\)](#)

This page titled [10: Nuclear Physics](#) is shared under a [CC BY 4.0](#) license and was authored, remixed, and/or curated by [OpenStax](#) via [source content](#) that was edited to the style and standards of the LibreTexts platform.