

CHAPTER OVERVIEW

5: Electric Charges and Fields

In this chapter, we begin the study of the electric force, which acts on all objects with a property called charge. The electric force is much stronger than gravity (in most systems where both appear), but it can be a force of attraction or a force of repulsion, which leads to very different effects on objects. The electric force helps keep atoms together, so it is of fundamental importance in matter. But it also governs most everyday interactions we deal with, from chemical interactions to biological processes.

- [5.1: Prelude to Electric Charges and Fields](#)
- [5.2: Electric Charge](#)
- [5.3: Conductors, Insulators, and Charging by Induction](#)
- [5.4: Coulomb's Law](#)
- [5.5: Electric Field](#)
- [5.6: Calculating Electric Fields of Charge Distributions](#)
- [5.7: Electric Field Lines](#)
- [5.8: Electric Dipoles](#)
- [5.9: Electric Charges and Fields \(Summary\)](#)
- [5.10: Electric Charges and Fields \(Exercises\)](#)
- [5.11: Electric Charges and Fields \(Answer\)](#)

This page titled [5: Electric Charges and Fields](#) 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.