

## CHAPTER OVERVIEW

### 1: Electric Charge Interaction

This brief chapter describes the basics of electrostatics – the study of interactions between stationary (or relatively slowly moving) electric charges. Much of this material should be known to the reader from their undergraduate studies;<sup>1</sup> because of that, the explanations are very brief.

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<sup>1</sup> For remedial reading, I can recommend, for example, D. Griffiths, Introduction to Electrodynamics, 4th ed., Pearson, 2015.

[1.1: The Coulomb Law](#)

[1.2: The Gauss Law](#)

[1.3: Scalar Potential and Electric Field Energy](#)

[1.4: Exercise Problems](#)

Thumbnail: Electric field lines due to a point charge in the vicinity of PEC regions (shaded) of various shapes. (CC BY SA 4.0; K. Kikkeri).

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