

## CHAPTER OVERVIEW

### 3: Higher Dimensionality Effects

The description of the basic quantum-mechanical effects, given in the previous chapter, may be extended to higher dimensions in an obvious way. This is why this chapter is focused on the phenomena (such as the AB effect and the Landau levels) that cannot take place in one dimension due to topological reasons, and also on a few key 3D problems (such as the Born approximation in the scattering theory, and the axially- and spherically-symmetric systems) that are important for numerous applications.

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- [3.2: Landau Levels and the Quantum Hall Effect](#)
- [3.3: Scattering and Diffraction](#)
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