

## CHAPTER OVERVIEW

### 34: Frontiers of Physics

Frontiers are exciting. There is mystery, surprise, adventure, and discovery. The satisfaction of finding the answer to a question is made keener by the fact that the answer always leads to a new question. The picture of nature becomes more complete, yet nature retains its sense of mystery and never loses its ability to awe us. The view of physics is beautiful looking both backward and forward in time. What marvelous patterns we have discovered. How clever nature seems in its rules and connections. How awesome. And we continue looking ever deeper and ever further, probing the basic structure of matter, energy, space, and time and wondering about the scope of the universe, its beginnings and future.

#### Topic hierarchy

- [34.0: Prelude to Frontiers of Physics](#)
- [34.1: Cosmology and Particle Physics](#)
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Thumbnail: Lattice analogy of the deformation of spacetime caused by a planetary mass. Image used with permission (CC-SA-BY 3.0; Mysid).

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