

# 1. Introduction to Cosmology

Some of the most important concepts in cosmology are well explained in Nick Strobel's notes, and I suggest you start by reviewing his pages on

- [Other Galaxies](#), especially on the [Hubble Law](#).
- [Cosmology: Observations and Some Implications](#). Pay particular attention to the key concepts of homogeneity and isotropy.
- [Cosmology: Dark matter](#).
- [Cosmology: Embellishments on the Big Bang](#).

Be warned that Strobel's section on the Fate of the Universe is seriously out of date. Many of the statements there are wrong because they incorrectly take for granted that the cosmological constant is zero.

We now need to look at these ideas in a bit more mathematical detail.

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## Subsections

- [1.1 Cosmological expansion and redshift](#)
  - [1.2 The Geometry of the Universe](#)
  - [1.3 Dynamics of the Universe](#)
  - [1.4 Observational cosmology](#)
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