

Probing Cosmological Models with the Cosmic Microwave Background

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Abstract:

The anisotropies in the cosmic microwave background allow us a glimpse at the conditions of the early Universe. In this presentation I will explain how fluctuations in the temperature and polarization are related to models of the Universe and how we can reveal them with observations.

I will explain how astrophysical phenomena can effect the primary anisotropies, but also how they offer an additional window on the late time Universe.

In particular I will review the latest results of the Planck satellite mission of the European Space Agency and discuss their impact on cosmological models of the early Universe.