

Physics of the Cosmic Microwave Background

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- Lecture 1: General overview; the frequency spectrum of the CMB and the thermalization problem. Suggested reading: https://physique.cuso.ch/fileadmin/physique/document/2014_Chloba_notes.pdf
- Lecture 2: Cosmological recombination. Suggested reading: Sections I.2, I.3, I.5 of https://thesis.library.caltech.edu/6404/1/yacine_thesis.pdf
- Lecture 3: The perturbed Boltzmann equation for CMB photons. Suggested reading: <http://www.tapir.caltech.edu/~chirata/ph217/index.html>
- Lecture 4: CMB polarization; CMB lensing. Suggested readings: <https://arxiv.org/abs/astro-ph/0601594>, <https://arxiv.org/abs/astro-ph/0111606>
- Lecture 5: The Hubble tension. Suggested reading: <https://arxiv.org/abs/1908.03663>