

Title: Introduction to cosmology

Lecturer: Licia Verde

Date and Times:

- 20 July at 11:15
- 21 July at 11:15
- 22 July at 11:15
- 23 July at 11:15
- 24 July at 11:15

Summary of the proposed talk:

Introduction to cosmology in 5 lectures. Basic concepts, Hubble Law, the expanding Universe, FRW metric, Friedmann equations, dark matter, cosmic microwave background, large scale structures and galaxy surveys, inflation, dark energy and outlook for the future.

Prerequisite knowledge and references:

Basic maths and physics concepts.

**Biography-
Brief CV:**

I am an astrophysicist with interest in cosmology. My research topics include theoretical cosmology, cosmic microwave background, large scale structure, galaxy clusters, statistical applications and data analysis. I am involved with several projects. The Atacama Cosmology Telescope (ACT), is an experiment to map the cosmic microwave background (and secondary effects) with arcminute resolution. The associated Southern Cosmology Survey is an NSF funded effort to support ACT research and provides follow up observations ranging from the x-rays to the infrared. I am interested in the study of the large-scale structure of the Universe and in the analysis of galaxy surveys. I am part of the LSST large scale structure study group and the BPOL science working group.

<http://icc.ub.edu/~liciaverde>