

**Title:** Prof.

**Lecturer:** Licia Verde

**Date and Times:**

- Monday, 8<sup>th</sup> August from 9:15 am to 10:00 am
- Monday, 8<sup>th</sup> August from 10:15 am to 11:00 am
- Tuesday, 9<sup>th</sup> August from 9:15 am to 10:00 am
- Thursday, 10<sup>th</sup> August from 9:15am to 10:00 am

**Summary of the proposed talk:** Cosmology

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:**

October 1996 – August 2000: PhD student, Marie Curie Fellow at the Institute for Astronomy, University of Edinburgh, UK

October 1990 – July 1996: Laurea degree in Physics Università di Padova, IT

October 1994 – June 1995: Exchange student at the University of Edinburgh, Edinburgh, UK

January 1996 – June 1996: Exchange student at the University of Edinburgh, Edinburgh, UK

September 2000 – June 2001: Research Associate, Dept. of Astrophysical Sciences, Princeton University

July 2001–June 2002: Research Associate, Physics and Astronomy department, Rutgers University, NJ, USA

July 2002–June 2003: Chandra Fellow and Spitzer Fellow, Dept. of Astrophysical Sciences, Princeton

September 2007 – present: ICREA professor1, Barcelona (Spain)

July 2003– August 2007: Faculty, Dept. of Physics and Astronomy, University of Pennsylvania, PA, USA

**Publications:** None