

## Cosmology

This course will consist of a series of four presentations that will highlight some of the most up-to-date ongoing research in the field of cosmology at the Institute for Advanced Study. The series is being organized by IAS Professor Matias Zaldarriaga. Dr. Zaldarriaga has made many influential and creative contributions to our understanding of the early universe, particle astrophysics, and cosmology as a probe of fundamental physics. Much of his work centers on understanding the clues about the earliest moments of our universe encoded in the Cosmic Microwave Background, the faint glow of radiation generated by the Big Bang, and in the distribution of matter in the late Universe.

The presenters will be Professor Matias Zaldarriaga and two of his IAS faculty colleagues in the School of Natural Science. The focus of the course, and what is new this year, will be the question of what do we know about, and how do we model, what has been designated as “Dark Matter”. The course should be accessible to anyone with an understanding of elementary physics and basic mathematics who also has an interest in cosmology.

There is no textbook, nor will there be any additional required reading.

**Leaders:** Professor Matias Zaldarriaga and additional Faculty and Members of the School of Natural Sciences, Institute for Advanced Study.

**Fridays:** 3:30 to 5:30 p.m., 4 weeks: May 3 through May 24

**Location:** Institute for Advanced Study.