ΓΕΝΙΚΟ ΣΕΜΙΝΑΡΙΟ ΤΜΗΜΑΤΟΣ ΦΥΣΙΚΗΣ

PHYSICS COLLOQUIUM

Thursday, 24 November 2016

17:00 -18:00

3rd Floor Seminar Room

"Current Planck status and what to expect in the next release"

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Abstract

Since its first release in 2013, Planck has played a dominant role in both contemporary cosmology and astrophysics, providing detailed observations of the full-sky in nine frequencies between 30 and 857 GHz. Based on these measurements, cosmologists have been able to put percent-level constraints on many of the most important cosmological parameters, and rule out large classes of cosmological models. The same observations have also opened up a completely new window on the astrophysics of our own Milky Way, for instance through sensitive measurements of polarized thermal dust and the density of molecular CO. In this talk, I will give a general review of the Planck mission and its current state. I will also touch upon a few recent high-visibility questions, including the BICEP2 discovery of B-mode polarization; the discrepancy between CMB and local measurements of the Hubble constant; and the immense difficulties associated with measuring the optical depth of reionization.