



ARNOLD SOMMERFELD
CENTER FOR THEORETICAL PHYSICS



Arnold Sommerfeld Lecture Series

Professor Licia Verde

University of Barcelona

Research Seminar:

An Excursion into Non-Gaussianity

Non-Gaussianity carries information about both the late-time growth of structure and the physics of the early Universe. I will discuss three complementary ways of exploiting it in large-scale structure: the galaxy bispectrum, the abundance of rare objects, and the scale-dependent response of biased tracers to long-wavelength modes. I will highlight recent work with DESI, including joint power-spectrum and bispectrum analyses, as well as constraints from ACT SZ cluster abundance and halo bias. I will also discuss how squeezed-limit signatures connect large-scale structure to primordial physics and cosmological-collider ideas, and the challenges posed by survey geometry, tracer selection and assembly bias.

Thursday, October 22, 2026, 16:15 h, Room A348, Theresienstr. 37, LMU

Prof. Dieter Lüst and Prof. Slava Mukhanov