



UNIVERSITÀ
DEGLI STUDI
DI PADOVA



VENICE **ASIAGO** 2016

DATE: 24TH August 2016

TIME: 10:30 – 12:30

LOCATION: Osservatorio Astronomico di Asiago, via dell'Osservatorio, 8; Asiago, Vicenza

Inflation and particle physics

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Fudan University

ABSTRACT

I will introduce the scenario of Cosmological Inflation, in which the Horizon problem and the curvature problem find a solution. I will show concrete examples deploying heuristic scalar field models, and then show how the paradigm of inflation has been successful in developing the theory of cosmological perturbations and explaining the features of the microwave background radiation. I will then switch to the use of realistic microphysical models, showing how definite signatures might arise while considering the standard model of particles' physics, known through terrestrial experiments.

FURTHER READINGS

Will be provided during the lecture.