

# Inferring cosmological parameters from Baryon Acoustic Oscillations datasets

*Thursday 8 September 2022 15:50 (20 minutes)*

Baryon acoustic oscillations (BAO) involve measuring the spatial distribution of galaxies to determine the growth rate of cosmic structures. In this talk we discuss the use of different BAO dataset to infer the parameters of different cosmological models. Explicitly, we use BAO + Chronometers data, the Pantheon type Ia supernova, and the Hubble diagram of gamma-ray bursts and quasars to put a limit on the Hubble constant in LCDM, OkCDM and wCDM . Then we marginalize over  $H_0$  to infer the parameters of a set of dark energy models.

**Presenter:** Prof. STAICOVA, Denitsa (Institute for Nuclear Research and Nuclear Energy, BAS)