FZU Institute of Physics of the Czech Academy of Sciences

Invitation

to the seminar of Division of Elementary Particle Physics of the Institute of Physics of the Czech Academy of Sciences

Prof. Arman Shafieloo

KASI - Korea Astronomy and Space Science Institute, Daejeon

Reconstructing Dark Energy: Can we be fooled by Phantom Crossing?

Abstract: Reconstructing the expansion history of the universe and the properties of dark energy has been a central goal in physical cosmology, with far-reaching implications for our understanding of fundamental physics. By examining the behavior and influence of dark energy through cosmological observations, we can gain insight into the forces driving the universe's accelerated expansion. In this presentation, I will examine methods for reconstructing dark energy properties, assess findings from the latest observational data such as DESI DR2, and discuss potential advancements in the field that may enhance our understanding of the universe's fundamental dynamics. I will also discuss the possibility of Phantom Crossing in the equation of state of dark energy considering recent cosmological observations.

When: Thursday, January 22, 2026 at 2PM

Where: Dvořák hall, FZU, Pod Vodárenskou věží 1, Prague

For more information, please see https://indico.fzu.cz/event/324/

Roman Lysák Jiří Hejbal