3-MINI COURSES

ON INFLATION, COMPACT STARS AND SINGULARITIES

DATA: De 2 a 26 de maio de 2023
LOCAL: Sala 1, PPGFis, UFES

1. Introduction to single-field inflation – Michael Bacchi (PhD Student)

Introduces the shortcomings of the Hot Big Bang Theory, inflation, QFT in curved spacetime, primordial and cosmological perturbations, the last scattering surface, and CMB anisotropies.

2. Astrophysics of compact objects – Tulio Ottoni (PhD Student)

Covers astrophysics of compact objects, including white dwarfs, core-collapse supernovae, and neutron stars, focusing on their structure, equation of state, and tests of gravitational regimes.

3. Interesting problems in cosmology and singularities – Prajwal H. P. (PhD Student)

Explores open problems in modern cosmology, including fine-tuning, inflation-related, and matter-antimatter asymmetry issues, as well as singularities in the universe, both globally and locally.

GUEST LECTURERS

1. Tays Miranda de Andrade (Postdoc, University of Jyväskylä, Finland)
2. Jonas Pedro Pereira (Postdoc, UFES, Brazil)
3. Adrià Gómez-Valent (Postdoc, INFN, Rome)

CRONOGRAMA

	SEGUNDA	TERÇA	QUARTA	QUINTA	SEXTA
MANHÃ	Mini course 3, 11h - 13h	Mini course 2, 10h - 12h			
TARDE			Mini course 1, 15h - 17h	Mini course 3, 14h - 16h	Mini course 1, 15h - 17h

For more information, scan the QR Code or access the webpage: <https://www.cosmo-ufes.org/regular-mini-courses.html>.

Universidade Federal do Espírito Santo
Cosmo-ufes Center for Astrophysics and Cosmology
PPGCosmo