

DArk Energy: from Fundamental Theories to Observations (and back)

Monday, 11 September 2023 - Friday, 15 September 2023

INFN-LNF, Auditorium Bruno Touschek

Programme

Monday, 11 September 2023

Registration (10:30 - 11:30)

Welcome from the LNF Director Dr. Fabio Bossi (11:30 - 11:50)

Status of Cosmological Tensions (12:00 - 13:00)

- Presenter: VERDE, Licia

LUNCH (13:00 - 15:30)

Teleparallel Cosmology - From theory to observational constraints (15:30 - 16:10)

- Presenter: LEVI SAID, Jackson

Nonlinearities in the dark sector in the early and the late Universe (16:10 - 16:50)

- Presenter: BRUNI, Marco

Posters and WINE (17:00 - 18:30)

Tuesday, 12 September 2023

Normal theoretical ideas on vacuum energy (10:00 - 10:40)

- Presenter: STRUMIA, Alessandro

Cosmology from forthcoming Euclid Weak Lensing Measurements (10:40 - 11:20)

- Presenter: CARDONE, Vincenzo Fabrizio

COFFEE BREAK (11:20 - 11:50)

Cosmology from forthcoming Euclid Galaxy Clustering Measurements (11:50 - 12:30)

- Presenter: CARBONE, Carmelita

TBA (12:30 - 13:10)

- Presenter: KUNZ, Martin

LUNCH (13:10 - 15:00)

Dark Energy with SKA (15:00 - 15:40)

- Presenter: CAMERA, Stefano

Challenges for the dark-matter and dark-energy models that point towards a new model (15:40 - 16:20)

- Presenter: KROUPA, Pavel

COFFEE BREAK (16:20 - 16:50)

Model independent reconstruction of deviations from GR with cosmological data (16:50 - 17:30)

- Presenter: MARTINELLI, Matteo

Round table discussion (17:30 - 18:30)

Wednesday, 13 September 2023

H0 from Cosmic Microwave Background measurements (10:00 - 10:40)

- Presenter: GERBINO, Martina

The near-universe value of the Hubble constant from Cepheids and TRGB (10:40 - 11:20)

- Presenter: CASERTANO, Stefano

COFFEE BREAK (11:20 - 11:50)

TBA (11:50 - 12:30)

- Presenter: VINCENZI, Maria

Cosmological tensions guiding the path beyond Λ CDM (12:30 - 13:10)

- Presenter: ZOSSO, Jann

LUNCH (13:10 - 15:00)

Time Delay Cosmography with Strongly Lensed Quasars (15:00 - 15:40)

- Presenter: COURBIN, Frédéric

The Different Faces of Cosmography (15:40 - 16:20)

- Presenter: BENETTI, MICOL

COFFEE BREAK (16:20 - 16:50)

TBA (16:50 - 17:30)

- Presenter: GOUVEA MAURICIO FERREIRA, Elisa

Round table discussion (17:30 - 18:30)

SOCIAL DINNER (20:15 - 23:15)

Thursday, 14 September 2023

A minimal SM/ Λ CDM cosmology (10:00 - 10:40)

- Presenter: TUROK, Neil

S-matrix and Dark Energy (10:40 - 11:20)

- Presenter: DVALI, Gia

COFFEE BREAK (11:20 - 11:50)

Ultralight axions in string cosmology (11:50 - 12:30)

- Presenter: CICOLI, Michele

TBA (12:30 - 13:10)

- Presenter: PERCACCI, Roberto

LUNCH (13:10 - 15:00)

Free Afternoon (15:00 - 18:00)

Friday, 15 September 2023

TBA (10:00 - 10:40)

- Presenter: DAVIS, Anne-Christine

TBA (10:40 - 11:20)

- Presenter: EDMUND J., Copeland

COFFEE BREAK (11:20 - 11:50)

Current and future constraints on $f(Q)$ cosmology with Λ CDM background (11:50 - 12:30)

- Presenter: NUNES, Nelson

TALKS FROM POSTER WINNERS (12:30 - 13:10)

LUNCH (13:10 - 15:00)

Cosmological Tensions and a time-dependent Planck Mass (15:00 - 15:40)

- Presenter: BENEVENTO, Giampaolo

TBA (15:40 - 16:20)

- Presenter: VISINELLI, Luca

Concluding remarks (16:20 - 16:30)