

Exploring New Frontiers in Cosmology

06–31 July 2026

Organisers:

Eleonora Di Valentino (The University of Sheffield)

William Giarè (University of Hawaii)

Matteo Martinelli (INAF, Osservatorio Astronomico di Roma)

Vivian Poulin (CNRS, Université de Montpellier)

Elsa M. Teixeira (CNRS, Université de Montpellier)

Luca Visinelli (Università degli Studi di Salerno)



GALILEO GALILEI INSTITUTE
LARGO ENRICO FERMI, 2
FIRENZE



Week 2: Practical information

13th – 17th July

- **We start at 9:30am every day**
- Three long talks (~ 1h15) per day
- Informal discussion sessions in the afternoon
- Everyone has an office to work and organise discussions
- **Lunches and coffee breaks are provided**
- Group picture on Thursday at lunch time
- Slack is our main channel for updates/materials
- Remote connection details on indico

INDICO



SLACK



Week 2: Observations and Systematics

13th – 17th July

The focus is on observations and systematics across different surveys and probes in the context of current cosmological tensions. We will also consider novel probes that offer independent measurements and may help identify hidden biases in existing methods.

MONDAY, 13 JULY

- Time-delay cosmography with strongly lensed quasars: current results and future prospects

Alternative routes to H_0 : time-delay

- cosmography with lensed SNe and the tailored expanding photosphere method for SNe II
- SHOES

Martin Millon

Stefan Taubenberger

Adam Riess (online)



Week 2: Observations and Systematics

13th – 17th July

The focus is on observations and systematics across different surveys and probes in the context of current cosmological tensions. We will also consider novel probes that offer independent measurements and may help identify hidden biases in existing methods.

TUESDAY, 14 JULY

- The TRGB and JAGB Distance Scales: Current Status, Systematics, and the Hubble Constant
- Current status of type Ia supernova cosmology
- The present and the future of quasars in cosmology

Siyang Li (online)

Lluís Galbany

Elisabeta Lusso



Week 2: Observations and Systematics

13th – 17th July

The focus is on observations and systematics across different surveys and probes in the context of current cosmological tensions. We will also consider novel probes that offer independent measurements and may help identify hidden biases in existing methods.

WEDNESDAY, 15 JULY

- **KiDS-Legacy: Final cosmological constraints from the complete Kilo-Degree Survey**
- **Weak lensing: what's next?**
- **Reconstructing the Universe using Peculiar Velocities of Type Ia Supernovae**

Benjamin Stölzner

Isaac Tutusaus

Francesco Sorrenti



Week 2: Observations and Systematics

13th – 17th July

The focus is on observations and systematics across different surveys and probes in the context of current cosmological tensions. We will also consider novel probes that offer independent measurements and may help identify hidden biases in existing methods.

THURSDAY, 16 JULY

- **LSS beyond the BAO**
- **DES review**
- **Particle cosmology in the era of tensions**

Marko Simonovic

Marco Raveri

Martina Gerbino



Week 2: Observations and Systematics

13th – 17th July

The focus is on observations and systematics across different surveys and probes in the context of current cosmological tensions. We will also consider novel probes that offer independent measurements and may help identify hidden biases in existing methods.

FRIDAY, 17 JULY

- **CMB: a global view**

Lloyd Knox

- **Modified recombination meets the Hubble tension**

Jens Chluba

- **Dark Energy: what's next?**

Guadalupe Cañas-Herrera



Organisers



GALILEO GALILEI INSTITUTE
LARGO ENRICO FERMI, 2
FIRENZE

- **Eleonora Di Valentino** (The University of Sheffield)
- **William Giarè** (University of Hawaii)
- **Matteo Martinelli** (Osservatorio Astronomico di Roma)
- **Vivian Poulin** (Université de Montpellier)
- **Elsa Teixeira** (Université de Montpellier)
- **Luca Visinelli** (Universita degli Studi di Salerno)



Email Contacts: giare@hawaii.edu elsa.teixeira@umontpellier.fr

Thank you for coming and enjoy!

This week is meant to be collaborative – ask questions,
incentivise discussion and enjoy Florence!