



THESEUS Conference 2026 – Agenda (Feb. 23rd, 2026)

Invited talks (20 min)
Contributed talks (15 min)
Posters flash talks (5 min)
Social events

DAY 1 (March 24th)

08:45-09:00: Welcome addresses (**Caballero-Garcia, Alicia Miró Moncho, Castro-Tirado, Amati**)

Section 1: *THESEUS* mission

09:00-09:20: The *THESEUS* mission: science case and concept (**Amati**)
09:20-09:35: The SXI: instrument description and scientific performances (**Lerman**)
09:35-09:50: The SXI optical system (**Feldman**)
09:50-10:10: The SXI focal plane, back-end electronics and data handling units (**Gonzalo** - remote)
10:10-10:30: The XGIS: instrument description and scientific performances (**Virgili**)
10:30-10:45: Imaging red shifted, low energy X-ray sources with the XGIS imager/spectrometer of the *THESEUS* mission (**Connell**)

10:45-11:15: coffee break

11:15-11:35: Design of the *THESEUS* Intra-Red Telescope from the photon detection to the data on-board processing (**Meuris**)
11:35-12:55: Expected performance of the *THESEUS* IRT calibration unit (**Toth**)
12:55-12:05: Mechanical Design Concept Challenges for the *THESEUS* InfraRed Telescope's Calibration Unit (**Joo**)
12:05-12:20: Optical Performance Analysis of NIR LEDs in the *THESEUS* Infrared Telescope Calibration Unit (**Kiss**)
12:20-12:35: IRT Telescope breadboarding (**Vernani**)
12:35-12:55: *THESEUS* scientific requirements (**Kuulkers**)
12:55-13:15: *THESEUS* concept of operations and GO capabilities (**Vavrek**)

13:15-14:45: lunch break

14:45-15:05: Cosmology and multi-messenger astrophysics with *THESEUS* (**Tanvir**)
15:05-15:25: Observatory science with *THESEUS*; GRB and SNRs in distant galaxies; the radio ISM (**Blain**)
15:25-15:45: The SIXTE simulator and *THESEUS* (**Lorentz**)

Section 2: Early Universe cosmology

15:45-16:05: Shedding light on the early Universe with *THESEUS* (**Christensen**)
16:05-16:25: High-*z* GRB Host Galaxies: Two Decades of Discoveries and the Road to *THESEUS* (**Saccardi**)
16:25-16:45: Shedding light on the early Universe with *THESEUS* (II) (**Vergani**)

16:45-17:15: coffee break

17:15-17:35: *JWST* constraints on GRB progenitors across cosmic time (**Levan**)
17:35-17:55: Finding relativistic optical transients (**Castro-Tirado**)

17:55-19:00 Poster presentations

20:00-21:30 Welcome cocktail



DAY 2 (March 25th)

Section 2: Early Universe cosmology (continued)

- 09:00-09:15: The ESO Stargate program for gamma-ray bursts follow-up (**Malesani**)
09:15-09:30: Progenitor Ambiguity in High-Redshift Short GRBs: The Case of GRB 241105A (**Dimple**)
09:30-09:45: High-z GRB light curve simulations with XGIS using an internal-shock model calibrated on real data (**Maistrello**)
09:45-10:00: Constraints on the Redshift Dependence of HI Column Density: Current Swift Results and Future Prospects with *THESEUS* (**Racz**)

Section 3: Multi-Messenger Astrophysics

- 10:00-10:20: Multi-messenger science with *THESEUS* (**Stratta**)
10:20-10:40: Synergies of *THESEUS* with next generation GW detectors (**Ronchini**)
10:40-10:55: Relativistic MHD simulations for interpreting merger-driven GRB observations (**Pavan**)
10:55-11:10: E2E Forecasting of Multi-Messenger Synergies: Joint BNS-sGRB Detections with *THESEUS*, MAGGPY, and GWFish (**De Santis**)

11:10-11:40: coffee break

- 11:40-11:55: Right under our noses: GW progenitors spotted with Hubble-FUV in the local starburst IZw18 (**Szécsi**)
11:55-12:15: *Einstein Probe*: A status update (**J.-U. Ness**)
12:15-12:30: GALI-a gamma ray burst localizing instrument (**Natur**)
12:30-12:45: Lessons learned from the first scientific results of COLIBRI (**Basa**)

Section 4: GRB science

- 12:45-13:05: GRB science with *THESEUS* (**Ryde**)

13:05-14:35 lunch break

- 14:35-14:55: Unveiling the Pre-Prompt Afterglow: Implications for X-ray Plateau Origins and Future *THESEUS* Observations (**Guidorzi**)
14:55-15:15: Fast X-ray Transients with *THESEUS* (**Frontera**)
15:15-15:30: Obscured High-Energy Transients: Dark GRBs and Emerging Dark FXTs in the *THESEUS* Era (**Gupta**)
15:30-15:45: The impact of the nuclear equation of state in extreme stellar explosions (**Bugli**)
15:45-16:00: Does the pair annihilation line in the BOAT GRB221009A imply several emission regions? (**Gnaoui**)

Section 5: Fundamental physics tests with high-energy transients

- 16:00-16:20: Fundamental physics tests with *THESEUS* (**Malyshev**)
16:20-16:40: Measuring cosmological parameters with GRB (**Piedipalumbo**)

16:40-17:10: coffee break

- 17:10-17:30: Quantum Gravity with *THESEUS*: A redshift hunter to probe Lorentz Invariance Violation with Gamma-Ray Bursts (**Leone**)
17:30-17:45: Probing the nuclear physics of neutron stars with *THESEUS* and Gamma-ray bursts (**Guillot**)
17:45-18:00: Improving Transient Detection with *Swift*-XRT (**Srivastava**)
18:00-18:15: What our own eyes tell us: searching for optical pulsations from millisecond pulsars (**La Placa**)

20:00-22:30 Conference Dinner



DAY 3 (March 26th)

Section 6: Time-Domain Astrophysics and Observatory science

- 08:30-08:50: Time Domain Astrophysics with *THESEUS* (**Mereghetti**)
- 08:50-09:10: Time Domain Astrophysics with *THESEUS* (II) (**Caballero-Garcia**)
- 09:10-09:25: Magnetar fraction in core-collapse supernovae (**Ronchi**)
- 09:25-09:40: The nature of the dark fast X-ray transient EP241103a (**Sierras**)
- 09:40-09:55: Multiwavelength Observations of Galactic Black Hole Transients in the *THESEUS* Era (**Kalemci**)
- 09:55-10:10: Automatic classification of x-ray variable sources (**Blay**)
- 10:10-10:25: Prospects for Magnetar Giant Flares observations with *THESEUS* (**Arrigoni**)

10:25-10:55: *coffee break*

- 10:55-11:10: Accretion flows in microquasars (**Zdziarski**)
- 11:10-11:25: X-ray lightcurve systematic analysis and application to GRB high-energy emission correlations (**Vigliano**)

Section 7: Current and Future key facilities for *THESEUS* science

- 11:25-11:45: The ASI space programme (**Volpe**)
- 11:45-12:05: *SVOM* (**Gotz**)
- 12:05-12:20: *Einstein Probe* lobster-eye optics and future developments (**Chen Zhang**)
- 12:20-12:35: A Large-format CMOS detector for *Einstein Probe* mission (**Ling**)
- 12:35-12:50: Study on GRB Detection Efficiency and Localization Capability of Four Cubesat Instrument Models (**Sen**)
- 12:50-13:05: *NewAthena* (**Guainazzi**)

End of the conference.

- 16:30-19:30 Guided visit to Málaga
- 20:00-22:30 dinner by the seaside

(visit and dinner need to be confirmed upon arrival/registration on-site)