

IAU Symposium 401: Advancing Reference Systems, Ephemeris, and Standards



Dear Colleagues,

It is our pleasure to announce that the International Astronomical Union (IAU) Symposium "Advancing Reference Systems, Ephemeris, and Standards: from the Earth and the Moon to Solar System Bodies" (IAUS 401) will be held from August 4 to 9, 2025 at the National University of La Plata (UNLP), La Plata (Argentina).

Reference systems and their standardization are of paramount importance to many fields of astronomy. Some examples are the reduction of ground-based observations, space astrometry, astrophysics missions, and space missions to solar system planetary bodies and beyond. The concept of a reference system and its realization requires the convergence of reference frames, ephemeris, and time scales to be developed respecting

associated standards, thus fulfilling one of the IAU strategic goals as he provider of astronomical standards and their use.

The IAUS 401 will provide a forum to discuss the latest results and prospects in these fields, and thus facilitate the coordination of common standards across agencies and organizations.

The IAUS 401 is structured in six key topics:

- 1.- Earth rotation models and Earth Orientation Parameters (EOP)
- 2.- Celestial and terrestrial reference systems/frames
- 3.- Reference systems/frames for the Moon and other solar system bodies
- 4.- Time scales and time metrology
- 5.- Ephemerides of solar system objects
- 6.- Astronomical standards

The IAUS 401 registration, abstracts submission, and IAU travel grant applications will start at the beginning of November. The symposium will be in a hybrid format, to welcome both in-person and online participation.

For additional information and contact details please refer to IAUS 401 website:

https://iaus401.fcaglp.unlp.edu.ar/

We are looking forward to seeing you in La Plata.

Sincerely,

Alberto Escapa, on behalf of the SOC and the LOC