EUROPEAN SPACE SCIENCES COMMITTEE

Call for Expressions of Interest for Membership of the European Space Sciences Committee in the domains of:

- **Astronomy and Fundamental Physics (3 new members)**
- **Earth Sciences (3 new members)**

The mission of the European Space Sciences Committee (ESSC) is to provide European space scientists with an independent voice in the European space arena. The Committee delivers unbiased, expert scientific advice to the European Space Agency (ESA), the European Commission, European national space agencies, and other key stakeholders across the space sector. It has become the reference body in Europe for independent scientific advice on space matters and a focal point for international research collaboration. To fulfil its mission and effectively represent the scientific community, the ESSC operates through specialist Panels covering the various domains of space sciences. The ESSC is currently looking for highly motivated individuals with proven experience in the fields of Astronomy and Fundamental Physics and Earth Sciences.

The Astronomy and Fundamental Physics (AFP) Panel focuses on space sciences beyond the Solar System. Its current expertise covers stellar structure and evolution, planet formation and evolution, the interstellar medium and star formation, high-energy and X-ray astrophysics, cosmology, and gravitational-wave astronomy. Among its recent activities, the Panel contributed to the ESSC's Report and Recommendations to the ESA Ministerial Council 2025 (CM25), assessing Europe's position in astronomy and fundamental physics within the ESA Mandatory Science Programme and outlining recommendations for future priorities. The AFP closely follows ESA's current and future missions in its domain, from Gaia, Euclid and CHEOPS to PLATO, Ariel, LISA and NewAthena, and provides ESA with expert input on their scientific return, programmatic challenges and the long-term planning of the Science Programme. Through regular exchanges with ESA and national agencies, the Panel also advocates for the needs of the European astronomy and fundamental physics community, including access to data, support for instrumentation and the involvement of early-career scientists.

The Earth Sciences Panel (ESP) focuses on scientific disciplines related to Earth sciences, particularly the ones benefitting from satellite data, including atmosphere, cryosphere, land, oceanography and solid Earth. Within the frame of its activities, the ESP provides independent scientific advice tacking stock of satellite data acquired by ESA (Earth Explorers, Opportunity missions), the European Commission (Copernicus programme), European National Missions, International Partners, and commercial entities. Among some of the recent ESP activities, the Panel contributed to the ESSC's invited statements for the 2025 ESA Conference on Ministerial level by preparing a document to illustrate the Groundbreaking

Science Discoveries Enabled by Earth Observation Satellites, for which a summary has been published in the IEEE Geoscience and Remote Sensing Magazine. Furthermore, the ESP has been invited since 2023 by ESA to evaluate the candidate dossiers received in the frame of the EO Excellence Awards.

Through this call, the AFP and ESP Panels seek to broaden and strengthen its current expertise by inviting expressions of interest from scientists wishing to join the Panel as new members. We invite submissions from experts in diverse areas within the fields of Astronomy and Fundamental Physics and Earth sciences. We are particularly interested in expertise in specialised fields described for each AFP and ESP Panels.

AFP Panel. The AFP plans to appoint three new members to replace its experts in exoplanets and planetary systems, stellar astrophysics, and star formation and the interstellar medium, whose terms are ending. Ideally, candidates will have a background in:

- Infrared, optical, submillimetre or radio observations;
- (space-based) instrumentation for astronomy.
- Applications from other fields that complement the expertise of the remaining Panel members are also welcome.

ESP Panel. The ESP plans to appoint three new members in the fields of:

- Polar and cryospheric sciences including:
    - the study of glaciers and ice sheets, sea ice, permafrost and seasonal snow
    - polar processes and science
- Atmosphere sciences including:
    - middle and upper atmosphere physics and chemistry
    - atmospheric dynamics, circulation and/or radiation
    - satellite remote sensing of the atmosphere, modelling and retrieval algorithms, and/or data assimilation (including AI/ML)
- Land expertise including:
    - land applications of Earth observation, particularly soil moisture, vegetation, and the terrestrial water cycle
    - microwave remote sensing, including passive radiometry, retrieval algorithms and validation
    - integrating satellite observations with land-surface models for climate research
- Any other expertise in Earth System Sciences

Applicants should demonstrate scientific excellence, experience in contributing to space missions. Previous experience with the programmatics and research landscape with ESA, NASA, international partners, European national space agencies, and other agencies is a bonus.

As a Panel member, you will be in direct contact with European decision-makers in the space domain, providing a critical, independent voice and helping to shape future science missions and programmes. Panel meetings are held regularly online in addition to the twice-yearly in-person plenary meetings of the full ESSC (all Panels) with high-level representatives of ESA and other space agencies. Additional in-person Panel meetings are occasionally organised, with the option to join remotely. The ESSC is committed to representing the space sciences community in all its diversity. Special attention will be drawn to ensure gender balance among the ESSC members and ensuring a fair distribution of members among the European countries, particularly originating from Eastern Europe.

The ESSC membership term is for 3 years, renewable once. We warmly welcome applications from scientists based at European institutions at any career stage, from early-career researchers to mid- and late-career professionals, as well as recent retirees.

ESSC work is not remunerated, but all costs related to its activities will be reimbursed.

If you are interested to join our Panels, please send a motivation statement (max 1 page) and a short CV (max 2 pages) to the ESSC secretariat/office (essc@esf.org) **by 15 January 2027**. Please state clearly which Panel you are applying to; the motivation statement should describe your areas of expertise and your potential contribution to the Panel.

Inquiries can be sent to the Panel chairs:

- **AFP:** Sakia Hekker, saskia.hekker@h-its.org
- **ESP:** Maurice Borgeaud, maurice.borgeaud@netplus.ch

Please feel free to share this call with any colleagues who may be interested.