Joint Event

Italian Space Agency - Auditorium via del Politecnico, snc, 00133, Roma



WORKSHOP Isolation/confinement studies for human space exploration

31 March – 2 April 2025



in collaboration with





WORKSHOP 20 years of Concordia research

3 April 2025



in collaboration with

















Long-duration space missions, such as those to the Moon, Mars and beyond, pose unique challenges for astronauts: prolonged isolation, confinement in extreme environments and the psychological impact of living far from Earth. Although the human body is highly adaptable, prolonged exposure to these stressors can have negative impacts on crew health, safety and performance.

To ensure the mental and physical well-being of crew members and address these issues, it is essential to understand how long-term isolation and confinement affect human health, and simultaneously develop support strategies to preserve astronauts' wellbeing. The Workshop "Isolation/confinement studies for human space exploration" aims at exploring the existing heritage and state-of-the-art of research related to isolation and confinement, with a particular emphasis on :

- Psychosocial issues and physiological effects induced by isolation/confinement
- Circadian rhythm alterations
- Technologies for health monitoring, diagnosis, medical assistance and first aid in isolation/confinement
- Diet, physical exercise, drugs and other countermeasures to isolation/confinement
- Interaction between environmental and human microbiome in isolated and confined extreme environments
- Habitat design and crew wellbeing in extreme environments

Info: isolation2025@asi.it

The "20 Years of Concordia Research" workshop will highlight lessons learned and key results from two decades of studies at Concordia Station, a high-fidelity analogue for space exploration. Topics include psychosocial and physiological effects of isolation, health countermeasures, and environmental-human microbiome interactions. The workshop will also explore opportunities for future research and collaboration.

Info: concordia@esa.int

Registration

Participation is free but registration is mandatory at this link: **REGISTRATION FORM Registration deadline: 27 March 2025**

The workshop will be streamed via Teams; registered participants will receive the link on 30 March. *Speakers are expected to attend in person.*

Abstract submission

Abstracts can be submitted through the following link: **SUBMIT YOUR ABSTRACT Abstract submission deadline: 31 January 2025.**

Authors of the selected abstracts will receive a confirmation by 18 February 2025

Scientific Organizing Committee:
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Subject Matter Experts (ESA, PNRA, IPEV)

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