

The long journey of human missions to Mars and back to Earth.

Monday 15 November, 5:30 - 7:30 PM AEST
The Shine Dome, 15 Gordon Street, Acton, ACT

The **Embassy of Italy**, in collaboration with the **Italian Cultural Institute in Sydney** and the **Australian Academy of Science**, invites you to an Italian Night with Five Southern Stars!

Five amazing scientists will discuss the challenges of travelling across Space, preparing for human missions to Mars, and what we can learn for life and sustainability on Earth.

Ambassador of Italy to Australia **H.E. Francesca TARDIOLI** will open the event.

The panel will be moderated by **Anna-Maria ARABIA**, CEO Australian Academy of Science, **Anna Maria FIORETTI**, Science Attaché at the Embassy of Italy with the participation of **Lillo GUARNERI**, Director of the Italian Cultural Institute in Sydney.

Free event - to register please click [HERE](#)

Light refreshments will be served for in-person attendees after the event with a selection of Italian wines

#WomenInSTEM



Embassy of Italy
Canberra





Title of Presentation

Not an empty Space: Cosmic Radiation and Dark Matter

Biographic notes

MSc in physics University of Bologna (Italy);
PhD in physics University of Siegen (Germany).
Director of the ARC Centre of Excellence on Dark Matter Particle Physics;
Awarded 2018 Australian Walter Boas Medal for Physics and
2013 Women in Physics Lecturer, Australian Institute of Physics.

Prof Elisabetta BARBERIO



Title of Presentation

Protecting astronauts from the health hazards of the harsh space radiation environment: reality and simulation

Biographic notes

MSc in physics University of Genova (Italy);
PhD in physics at the European Organization for Nuclear Research CERN, Geneve (Switzerland).
Associate Professor, School of Physics, University of Wollongong
2021 Women in Physics Lecturer, Australian Institute of Physics

Prof Susanna GUATELLI



Title of Presentation

Silicon mushroom: an innovative, miniaturised device for radiation protection of astronauts

Biographic notes

MSc in Nuclear Engineering Politecnico of Milan (Italy);
PhD at the University of Wollongong Centre for Medical Radiation Physics.
Researcher -Scientist at ANSTO - Centre for Accelerator Science
Winner of First prize People's Choice Award for the 3 Minutes Thesis Asia-Pacific Competition 2021

Dr Stefania PERACCHI



Title of Presentation

Manned entry to Mars and re-entry to Earth: an open engineering challenge

Biographic notes

Master's Degree in Mechanical Engineering, University "Federico II", Napoli (Italy);
Over 20 years of research in frontier fields from Hydrogen Energy to Experimental Aerothermodynamics;
Space Test Scientist, National Space Test Facility Manager, Australian National University, Canberra

Mr Eduardo TRIFONI



Title of Presentation

Interplanetary livestock: how insects could be our best resource on and away from our planet.

Biographic notes

MSc and PhD in Biology University of Roma 3 (Italy)
Entomologist with 20 years' experience in scientific research,
Manager of the Australian National Insect Collection at CSIRO in Canberra

Dr Federica TURCO

