

Space Habitat Event- November, 13th-16th 2025

PROGRAM – version 4.0 (November 10th)

Inscription can be done in: <https://forms.gle/1BeZ3VKFuXgHDEPJ6>

The presentations will happen on Zoom.

After event will be published an abstract book with links for presentations on @HabitatMarte YouTube channel.

Organizers: @HabitatMarte Space Analog Station, Space Reinassance Inititative-SRI, Mars Society Brazil and Universidade Federal do Rio Grande do Norte – UFRN.

November, 13th, 2025

November, 13th, 2025

10 AM UTC / 7 AM Brazil Time / 2h30m PM IST Time

SPACE PSYCHOLOGY, HEALTH & SOCIETY:

Astrodesertanism: learnings from Brazilian semiarid to think future presence on Mars

Julio Rezende– @HabitatMarte – juliofdrezende@gmail.com

Against Bio-Capitalism in Space: Seeds as Commons for Humanity

Raoul Cardellini Leipertz; Centre for Higher Defence Studies; raoul.cardellini@gmail.com

Art, Symbolism, and Education in Supporting Psychology of Space Habitats

Aditya Ghosh, Diggity Solutions pvt. Ltd., aditya.nspires@gmail.com

Color psychology in space dynamics

Pawana Shettigar, BK Birla college, and teampawana@gmail.com

Audio-Visual Entrainment Technology (AVE) Activating Clinical and Physiological Mechanisms to Support Human Performance in Space Environments

Thorsten Eschweiler; Mind Alive Inc., thorstenesche@aol.com

Simulating Circadian Rhythm Disruptions and Cognitive Performance on Astronauts Using Machine Learning Models

Raahil Sheikh (raahilsheikh711@gmail.com),

Arjun Dabas(arjundabas04@gmail.com),

Prathamesh Minde(prathameshmimde911@gmail.com) - Beyond Space Technologies
Tejaswini Yadav (tejaswini.yadav454@gmail.com),
Uma Shanker (Uma.e8134@cumail.in) - Department of Aerospace Engineering, Chandigarh
University, Punjab

Emergency protocols by Habitat Marte

Julio Rezende - @HabitatMarte – juliofdrezende@gmail.com

November, 13th, 2025

12 PM UTC / 9 AM Brazil Time / 4h30m PM IST Time

SPACE SUSTAINABILITY AND IN-SITU RESOURCES UTILIZATION - ISRU:

The application of artificial intelligence in human space missions

Karin Brunnemann

Large scale colonization of ISRU 3rd class space architecture

Samer El Sayary, Alexandria University and Beirut Arab University,

samer.elsayary@alexu.edu.eg

Preliminary design of a multigenerational interstellar spaceship's self-sustaining habitat able to host a population of 1,500 people

Guido Sbrogiò (MS Physics, Polytechnic of Turin, Italy)

Giacomo Infelise (MA Architecture),

Veronica Magli (MS Economics),

Nevenka Martinello (MS Environmental Engineering),

Federica Serpe (MS Psychology)

MARTE: Mobility and Autonomous Navigation for Terrain in Low-Gravity Environments

Sibgha Anwar; Institute of Space Technology; sibghaanwar8@gmail.com

November, 13th, 2025

5 PM UTC / 2 PM Brazil Time / 9h30m PM IST Time

SPACE AGRICULTURE:

Food production/Space agriculture

Ankita jauhari, Scienceoversea, ankitajauhari555@gmail.com

Layer of hope

Tanya Srivastva - High schooler - tanyasrivastva495@gmail.com

November, 13th, 2025

5h30m PM UTC / 2h30m PM Brazil Time / 10 PM IST Time

NEW FRONTIERS OF SPACE:

Domus Arsia: Lava Tube Habitats for Sustainable Mars Settlements

Fiorella Karla Nava Chuctaya - NAVA Architects & Associates, Space Architecture Lab, Peru
- fiorellakarlanava@gmail.com

Jennifer G. Blank - Blue Marble Space Institute of Science, USA - jen@bmsis.org

Beneath the Red Horizon: Lava Tubes and Regolith as Pathways to Sustainable Martian Habitats

Shivani Vinod, Blue Marble Space Institute of Science, shivani1811@gmail.com

Jennifer G Blank, Blue Marble Space Institute of Science, jen@bmsis.org

The Role of Satellite Propulsion Systems in Enabling Long-Term Space Habitats

Mayar Fahim - Egyptian Space Agency - Email: mayar.fahim@egsa.gov.eg

November, 13th, 2025

7 PM UTC / 4 PM Brazil Time / 11h30m PM IST Time

SPACE SUSTAINABILITY AND EDUCATION

**Empowering Global STEM Education through the Analog Crew Education (ACE) Project:
Student-Driven Research during the World's Biggest Analog Mission**

Domina Stamas; Westlake Charter High School, analogcreweducation@gmail.com

Evandros Theodosiou; Independent Scholar, th.evandros@gmail.com

**Integrating Space Habitat Design with Next-Generation Propulsion Systems: A Framework
for Education and Sustainable Space Exploration**

1. Nour Al Imane Toufiq, toufiqnour665@gmail.com

2, Mars Moon Astronautics Academy and Research Sciences, MMAARS
mmaarsacademy@gmail.com

**ILMAH Crew XXVI Analog Astronaut Mission: Advancing Biotechnology, Molecular
Genomics, and Biomedicine for Human Spaceflight**

Susan Jewell, MD / MMAARS & UMIC, drjewellmd@gmail.com

Hybrid Nuclear-Solar Power Architectures for Sustainable Space Habitats

Arushi Surve. arushi.a.surve@gmail.com

**UMIC-PECA Interstellar Lab: An Innovative, Modular, Portable, and Expandable
Underwater Habitat Test Platform for Simulating Underwater Voyage Training Missions**

Susan Jewell, MD / MMAARS & UMIC, drjewellmd@gmail.com

Jambu (*Acmella oleracea*) Germination from the Future Space Exploration Perspective

Thiago Almeida Machado - thiago.machado@sesipa.org.br

José Wilker Lima da Cunha

Gabriel Renato Nascimento Santos

Maria Clara Sousa Medeiros

Mario de Sousa Ramos Neto

Pedro Lucas Calandrini Fernandes Carvalho

**The use of integrated autonomous medical support architectures for isolated
environments.**

Roosevelth Soares Carvalho; Universidade Federal do Maranhão;

arthur.roosevelth@gmail.com

José Emanuel Figueredo Lopes Lacerda; Instituto Geração de Marte;

jfigueredolopesl@gmail.com

13 de novembro de 2025

Apresentações em português:

13 de novembro de 2025

19h

Saúde espacial

Atuação fisioterapêutica e mindfulness no manejo da dor em astronautas e astronautas análogos

Gabriel Matheus Dutra Santos, Habitat Marte Space Analog Station,
gabriel_mds_@hotmail.com

Natália Hazbun Hernandez, Habitat Marte Space Analog Station, nataliahazbun@gmail.com

Ana Luiza de Almeida, Instituto Geração de Marte, alca092@hotmail.com

Fiorella Villegas Yaranga, Instituto Geração de Marte, fiorellavillegasyaranga@gmail.com

José Figueredo Lacerda, Instituto Geração de Marte, jfigueredolopesl@gmail.com

Marco Mammoli, Instituto Geração de Marte, 9marcomam@gmail.com

Protocolo Fisioterapêutico para Lombalgia em Astronautas e Astronautas Análogos: Proposta de Intervenção para Ambientes Extremos

Gabriel Matheus Dutra Santos, Habitat Marte Space Analog Station,
gabriel_mds_@hotmail.com

Natália Hazbun Hernandez, Habitat Marte Space Analog Station, nataliahazbun@gmail.com

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José Figueredo Lacerda, Instituto Geração de Marte, jfigueredolopesl@gmail.com

Marco Mammoli, Instituto Geração de Marte, 9marcomam@gmail.com

Traje de neuroestimulação e monitoramento muscular para contrabalançar efeitos da microgravidade.

Rayane Rodrigues; Instituto Geração de Marte, r2yhrodrigues@gmail.com

Astronomia e Astronáutica na Educação Básica: Desafios, Perspectivas e as Contribuições das Olimpíadas Científicas no Ensino Médio Potiguar

José Jefferson da Silva- SEEC-RN - j.jefferson.silva2023@gmail.com

Geneci Cavalcanti Moura de Medeiros - IFRN,

Raimunda Onofre da Silva – IFRN

Disfunções da Tireoide relacionado ao trabalho aeroespaciais: Implicações Metabólicas e Cardiovasculares

Edward Silva Ferraz- edwardfkcf@gmail.com – Instituto Geração de Marte;

Ana Luiza Ribeiro do Carmo- analuizacarmo6@gmail.com – Instituto Geração de Marte;

Gabriel Matheus Dutra Santos - gabriel_mds_@hotmail.com

José Emanuel Figueredo Lopes Lacerda - jfigueredolopesl@gmail.com – I. Geração de Marte;

Marco Mammoli 9marcomam@gmail.com - Instituto Geração de Marte

Fiorella Lilian Villegas Yaranga - fiorellavillegasyaranga@gmail.com – Inst. Geração de Marte

Objetivos de Desenvolvimento Sustentável da ONU e a Saúde Espacial como ser aplicada ambientes extremos, confinados e isolados.

Gabriel Matheus Dutra Santos - gabriel_mds_@hotmail.com - Habitat Marte Space Analog Station / Instituto Geração de Marte

José Emanuel Figueredo Lopes Lacerda - jfigueredolopesl@gmail.com – I. Geração de Marte;

Marco Mammoli - 9marcomam@gmail.com - Instituto Geração de Marte

Edward Silva Ferraz - edwardfkcf@gmail.com – Instituto Geração de Marte;

Ana Luiza Ribeiro do Carmo - analuizacarmo6@gmail.com – Instituto Geração de Marte;

Fiorella Lilian Villegas Yaranga - fiorellavillegasyaranga@gmail.com – Inst. Geração de Marte

Da Adaptação ao Aprimoramento: Biohacking, Bioética e o Futuro do Corpo Humano em Missões Lunares de Longa Duração

Miguel Vieira - Faculdade de Direito da Universidade Nova de Lisboa -

miguelfvieira@gmail.com

Sheila Torquato Humphreys - Faculdade de Direito da Universidade Nova de Lisboa -

sheilactba@gmail.com

Saúde nas missões espaciais análogas da estação Habitat Marte

Julio Rezende – UFRN / Habitat Marte – juliofdrezende@gmail.com

Monitoramento de Estufas Agrícolas

Arthur Lemos Sversutti,

Diogo Lamotta Resino,

Marcos Paulo Campos Caetano Silva,

Mateus Gobbi Marcano.

Antonio Barbeiro Neto

Vinicius Gabriel Marcelino Maciel

Iris Eduarda Forcel Roncada

13 de noviembre de 2025

Presentaciones en español:

13 de noviembre de 2025

9 PM BRT / ART

Arte, educación y ciencia espacial

El arte como elemento de cultura en una misión análoga

Sebastián Musso - Programa AstroTES - sebastian_musso@yahoo.com.ar

Victoria Cola - Programa AstroTES - victoriacolaarteparavos@gmail.com

Misión Argos, Primera Misión Análoga Inclusiva De Sudamérica

Sebastián Musso - Programa AstroTES - sebastian_musso@yahoo.com.ar

Victoria Cola - Programa AstroTES - victoriacolaarteparavos@gmail.com

SPACE NUTRITION: Caenorhabditis elegans: Un sistema modelo para estudiar el efecto de los compuestos bioactivos y nutraceuticos en el envejecimiento y las enfermedades neurodegenerativas

Elena, Lon Kan; Universidad Le Cordon Bleu, elena.lon-kan@ulcb.edu.pe

Carlos, Lon Kan; Universidad Autónoma del Perú, Carlos.prado@autonoma.pe

Edwin, Macavilca; Universidad Nacional José Faustino Sánchez Carrión, emacavilca@unjfsc.edu.pe

Alexander, Imán; Universidad Nacional de la Amazonía Peruana, alexander.iman@unapiquitos.edu.pe

Loida, Pacora; Universidad Nacional José Faustino Sánchez Carrión, lpacora@unjfsc.edu.pe

Laura, Salinas; Universidad Nacional Autónoma de México, lsalinas@ifc.unam.mx

14 de novembro de 2025

14 de novembro de 2025

10 AM UTC / 7 AM BRT / 2H30M PM IST

Ciência e agricultura espacial

O Acordo Artemis como Paradigma Emergente: Regulamentação da Exploração de Recursos Lunares e os Imperativos de Sustentabilidade na Nova Corrida Espacial

Sheila Torquato Humphreys; - Faculdade de Direito da Universidade Nova de Lisboa; - sheilactba@gmail.com

Protocolo de segurança para satélites IoT utilizando entropia ambiental e fragmentação de chaves.

José Soares Júnior; Instituto Geração Marte; joseacad18@gmail.com.

Educação é Ficção Científica: Imaginação e Formação para Habitats Espaciais

Jair Torres - jair.gmello@sp.senac.br - Senac SP

Henrique Sanches - henrique.psanches@sp.senac.br - Senac SP

O Duplo Papel da Agricultura na Colonização e Terraformação de Marte

Sheila Torquato Humphreys - Faculdade de Direito da Universidade Nova de Lisboa
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Miguel Vieira - Faculdade de Direito da Universidade Nova de Lisboa -
miguelfvieira@gmail.com

November, 14th, 2025

November, 14th, 2025

11 AM UTC / 8h AM Brazil Time / 3h30m PM Time

SPACE SOCIETY:

Living and working in free space: a choice of freedom!

Adriano Autino - Space Renaissance International CEO & Founder – Email:
adriano.autino@spacerenaissance.org

November, 14th, 2025

8h30m PM UTC / 5h30m PM Brazil Time / 1 AM Time

SPACE SUSTAINABILITY AND IN SITU RESOURCE UTILIZATION - ISRU:

Microbes as a Bridge: Designing Space Habitats through the Lens of the Holobiont and the Exposome

Romario Martínez Chigo / Independent - Blue Marbell YSP / soyromamartinez@gmail.com

Behavioral Implications of Space Design: Cognitive and Psychological Responses to Interior Habitat Stimuli in ICE Environments

CJ Baal (cj.baal@bmsis.org),

Jennifer G. Blank (jen@bmsis.org) - Blue Marble Space Institute of Science

Art and Science United: Toward a Biological Revolution in Martian Habitat Design

Bera Loretto

Jennifer G. Blank (jen@bmsis.org) - Blue Marble Space Institute of Science

The Adaptable Inflatable Mars Surface (AIMS) Habitat

Fizza Afreen, Blue Marble Space Institute of Science, fiddaafreen@gmail.com

Jennifer G Blank, Blue Marble Space Institute of Science, jen@bmsis.org

November, 14th, 2025

10 PM UTC / 7 PM Brazil Time / 2h30m AM IST Time

SPACE SOCIETY:

From Orbit to Opportunity: Leading with Purpose in the Space Age

Shelli Brunswick

Designing the Future of Lunar Habitats: Lessons from Analog Missions and Sustainability Frameworks

Jason Michaud

November, 15th, 2025

November, 15th, 2025

1 PM UTC / 10 AM Brazil Time / 5h30m PM IST Time

SPACE SOCIETY

Island Zero - A new development proposal for space habitats

Jerry Stone -

November, 15th, 2025

5 PM UTC / 2 PM Brazil Time / 9h30m PM IST Time

SPACE SOCIETY

Astronaut Parapsychic Training

Anibal Bentes

Organizers: Habitat Marte Space Analog Station, Space Reinassance Initiative-SRI, Mars Society Brazil and Universidade Federal do Rio Grande do Norte – UFRN.

Contacts: Prof. Julio Rezende (juliofdrezende@hotmail.com) / Whatsapp: +5584999818160 –

www.SpaceHabitatEvent.Blogspot.com