

EMC18 Program

Friday October 26th from 2 pm till 7 pm / Saturday 27th, 9 am - 6.30 pm / Sunday 28th, 9 am -12 am

Knowledge of the Planet

Tomaso Bontognali	Morphological biosignatures on Mars : what to expect and how to prepare not to miss them.
Michel Cabane	Curiosity on Mars: what is new about organic molecules?
Jean-Luc Josset	Search for Life on Mars, the ExoMars rover mission and the CLUPI instrument.
Philippe Lognonné	SEIS/INSIGHT: Toward the Seismic Discovering of Mars.
Antoine Pommerol	Imaging of the Martian surface by the Colour and Stereo Surface Imaging System (CaSSIS) of ExoMars Trace Gas Orbiter.

Time

Pierre Brisson	How to reconcile Martian Time and Earth Time.
Gaetano Mileti	Current research in Time & Frequency and next generation atomic clocks.
Pascal Rochat	Atomic Clocks for Global Navigation System.
Mitko Tanevski	Timing constraints for Mars missions: example of communications commands for ExoMars CLUPI instrument.
Alain Sandoz	Zero-Gravity : a watchmaking Complication to Measure Time Spent in the State of Microgravity.

The trip

Claude Nicollier	Artificial Gravity during Earth-to-Mars Transit.
Angelo Genovese	Advanced Electric Propulsion for Fast Manned Missions to Mars & Beyond
Pierre-André Haldi	The Interplanetary Transport System of Space-X revisited.
Jürgen Herholz	European manned Space projects.
Maxime Lenormand	Designing a 10-ton payload Martian lander.
Jean-Marc Salotti	Mission architecture for a European human mission to Mars based on a super heavy Ariane Launcher.

The establishment of Man on Mars

Théodore Besson	Scorpius Prototype - Towards a proof of concept of a closed habitat on-ground demonstration integrating main BLSS functions.
Olivia Haider	The AMADEE-18: a 25- nation Mars analog expedition in Oman.
Richard Heidmann	Beyond Human, Technical and Financial Feasibility, "Mass-production" constraints of a colony project fast development.
Roland Loos	From the Earth's stratosphere to flying on Mars, a few experiences from the Solarstratos project for the exploration of the Martian atmosphere.
Antonio del Mastro	Industry 4.0 technology for the building of a future Mars City: possibilities and limits of the application of a terrestrial technology for the human exploration of space.
Anne-Marlène Rüede	Design of a Mars Polar Research Base with a Crane System.

"Opening"

Robert Zubrin	Mars and the New Space Revolution.
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Debate :

Robots and Men on Mars under the Look of Time
 Claude Nicollier, Robert Zubrin, Richard Heidmann, Jean-Luc Josset, Pierre Brisson

Sponsors:

Space Exploration Institute (Neuchâtel); Musée International d'Horlogerie,
 Banque Cantonale Neuchâteloise, Spectratime, Trax-L

