



TUESDAY, FEBRUARY 27

Tuesday, 8:15*– 9:00 **BUS MONCLOA – ESAC** (*from Paseo Ruperto Chapí, <M> Moncloa)

Tuesday, 9:00 – 9:30 **REGISTRATION**

Tuesday, 9:30 – 9:45 **WELCOME**

Tuesday, 9:45 – 11:15

Session 1: Mars Express and other current Mars missions

Chair: *Dima Titov & Aymeric Spiga*

9:45 – 9:55 [Atmospheric Observations By Mars Express](#)
D. Titov et al.

10:00 – 10:10 [New dataset of atmospheric parameters retrieved by PFS-MEx](#)
M. Giuranna et al.

10:15 – 10:25 [A singular yearly persistent double vortex on Mars](#)
A. Sanchez-Lavega et al.

10:30 – 10:40 [Martian dust size and shape from Navcam and Hazcam images on MSL](#)
H. Chen-Chen et al.

10:45 – 10:55 [MAVEN IUVS Remote Sensing Highlights Relevant to Upcoming TGO Observations](#)
M. Chaffin et al.

11:00 – 11:10 [Mapping D/H on Mars using EXES aboard SOFIA](#)
T. Encrenaz et al.

Tuesday, 11:15 – 11:45 **COFFEE BREAK**

Tuesday, 11:45 – 13:15

Session 2: Analysis tools & Retrieval Methods

Chairs: *Franck Montmessin & Arnaud Mahieux*

11:45 – 11:55 [Uncertainty analysis and Preliminary Reconstruction of the Mars Atmosphere using the ExoMars Schiaparelli Flush Air Data System](#)
B. Van Hove and Ö. Karatekin

12:00 – 12:10 [Retrieval of gases and aerosols vertical profiles considering multiple scattering from OMEGA/MEx limb observations](#)
A. Mahieux et al.

12:15 – 12:25 [Synergistic retrieval of H₂O vapor in Mars' atmosphere: the path to a systematic 3D exploration of H₂O vapor](#)
F. Montmessin et al.

12:30 – 12:40 [Retrieval of Water Vapour Vertical Profiles in the Mars' Atmosphere using PFS/MEX data](#)
G. Sindoni et al.

12:45 – 12:55 [Retrievals of Ozone at the Terminator of Mars From SPICAM/Mex Solar Occultations](#)
A. Piccialli et al.

13:00 – 13:10 [Inversion Of Vertical Profiles Of CO₂ In The Mars Daylight Thermosphere From Its Limb Non-Thermal Emission At 4.3um](#)
S. Jimenez-Monferrer et al.

Tuesday, 13:15 – 15:00 **LUNCH**



Tuesday, 15:00 – 16:30

Session 3A: Surface, subsurface & geology. Part I

Chairs: Giancarlo Bellucci & Ozgur Karatekin

15:00 – 15:10 [Seasonal albedo changes as derived from OMEGA/MEX RGB glob-al maps](#)

F. Altieri, E. D'Aversa et al

15:15 – 15:25 [Heat flow and thermal structure of the Martian lithosphere](#)

L. Parro et al.

15:30 – 15:40 [Influence of subsurface properties on ice and methane clathrate stability on Mars](#)

E. Gloesener et al.

15:45 – 15:55 [Geology and mineralogy of the Auki Crater; Tyrrhena Terra; Mars: A possible post impact-induced hydrothermal system](#)

F. G. Carrozzo et al.

16:00 – 16:10 [Methane retained by carbon dioxide and water ices](#)

M. A. Satorre et al.

16:15 – 16:25 [Possible subsurface sediment mobilization and release of volatiles in southern Chryse Planitia; Mars](#)

I. van de Burgt et al.

Tuesday, 16:30 – 17:15 **POSTER SESSION + COFFEE**

Tuesday, 17:15 – 18:15

Session 4A: Atmospheric composition I: Ozone & Methane

Chairs: Anna Fedorova & Arianna Piccialli

17:15 – 17:25 [The Martian ozone layer as seen by Mars Express and by MAVEN](#)

F. Lefevre et al.

17:30 – 17:40 [Ozone Vertical Distribution on Mars From SPICAM/Mex UV Occultations](#)

A. Maattanen et al.

17:45 – 17:55 [Search of CH₄ on Mars using EXES aboard SOFIA](#)

S. Aoki et al.

18:00 – 18:10 [Understanding The Origin Of Methane On Mars Through Isotopic And Molecular Data From Nomad \(ExoMars\): Will There Be More Answers Or Questions?](#)

G. Etope et al.

Tuesday, 18:15 **END OF 1ST DAY SESSIONS**

Tuesday, 18:30 - 19:00 **BUS ESAC – MONCLOA**

Tuesday, 20:30 - 21:15 **VISIT Mars Exhibition at Fundación Telefónica (Fuencarral 3, <M> Callao / Gran Vía)**

Tuesday, 21:15 - 22:30 **COCKTAIL at Fundación Telefónica, Courtesy of Mars Express**



WEDNESDAY, FEBRUARY 28

Wednesday, 8:15* – 9:00 **BUS MONCLOA – ESAC** (*from Paseo Ruperto Chapí, <M> Moncloa)

Wednesday, 9:15 – 10:00

Session 4B: Atmospheric composition II: water vapour & clouds

Chairs: *Anni Määttänen & Yannick Willame*

9:15 – 9:25 [Long-Term Observations Of Water Vapor In The Middle Atmosphere Of Mars By Spicam/MEX](#)

A. Fedorova et al

9:30 - 9:40 [Spatial distribution of retrieved water ice cloud properties at Mars using OMEGA](#)

K. S. Olsen

9:45 - 9:55 [Extraction and validation of water ice cloud indicators from Mars Express / OMEGA spectral imagery - Determination of the diurnal cycle](#)

A. Szantai

Wednesday, 10:00 – 11:00

Session 5: Dust and aerosols I

Chairs: *Luca Montabone & Marco Giuranna*

10:00 – 10:10 [Improved Dust Climatology On Mars With New And Revised MGS/TES Aerosol Retrievals](#)

L. Montabone et al.

10:15 – 10:25 [Characterization Of Dust Activity On Mars From My27 To My32 By PFS-Mex Observations](#)

P. Wolkenberg et al.

10:30 – 10:35 [Atmospheric Aerosols Properties Via Solar Infrared Occultation Observations By Spicam IR](#)

D. Betsis et al.

10:45 – 10:55 [Dust Microphysical Properties From MEX/Omega Limb Data](#)

E. D'Aversa et al.

Wednesday, 11:00 – 11:30 **COFFEE BREAK**

Wednesday, 11:30 – 12:00

Session 5: Dust and aerosols II

Chairs: *Marco Giuranna & Luca Montabone*

11:30 – 11:35 [Meteorological Pressures At Gale Crater From A Comparison Of REMS/MSL Data And MCD/LMD Modelling: Effects Of Dust Storms](#)

I. Ordóñez-Etxebarria et al.

11:45 – 11:55 [Ice cloud; dust and ozone nadir retrieval using SPICAM/UV and influence of dust properties on the retrieved quantities](#)

Y. Willame et al.

Wednesday, 12:00 – 13:15

Session 6: Upper atmosphere

Chairs: *Francisco González-Galindo & Mike Chaffin*

12:00 – 12:10 [Spicam UV Observations Of Thermospheric Airglow And H Corona Variability](#)

M. Chaffin et al.

12:15 – 12:25 [Mars UV-Visible Dayside Airglow Observations And Predictions For ExoMars-TGO](#)

J.C. Gerard et al.

12:30 – 12:40 [Aurorae On Mars](#)

B. Ritter et al.

12:45 – 12:55 [Retrieval Of An Induced Magnetic Field In Mars Ionosphere From Marsis Data. Models and Simulations](#)

S. Jimenez et al.

13:00 – 13:10 [The Martian UV Dayglow: Global Simulation; Mars Express Measurements And Perspectives For Exomars](#)

F. Gonzalez-Galindo et al.



Wednesday, 13:15 – 15:00 **LUNCH**

Wednesday, 15:00 – 16:30

Session 7: Atmospheric modeling & Data assimilation

Chairs: *François Forget & Paul Streeter*

15:00 – 15:10 [First Ozone Reanalysis On Mars Using Spicam Data](#)

J. Holmes et al.

15:15 – 15:25 [Evaluation Of MSL-SAM Martian Methane Detections With The Mars Regional Atmospheric Modeling System \(MRAMS\)](#)

J. Pla-Garcia et al.

15:30 – 15:40 [Impact Of The Refinement Of The Vertical Resolution Of The LMD'S Martian Global Climate Model On The Simulation Of The Water Cycle](#)

M. Vals et al.

15:45 – 15:55 [Towards Assimilation of Exomars TGO ACS Observations into the LMD Mars GCM](#)

R. Young et al.

16:00 – 16:10 [A Multispacecraft Reanalysis Of The Atmosphere Of Mars](#)

S. Lewis, J. Holmes et al.

16:15 – 16:25 [The GEM-Mars General Circulation Model for Mars: Description and Evaluation](#)

L. Neary et al.

Wednesday, 16:30 – 17:15 **POSTER SESSION + COFFEE**

Wednesday, 17:15 – 18:15

Session 8: TGO and beyond

Chairs: *Ann Carine Vandaele & Oleg Korablev*

17:15 – 17:25 [ExoMars 2016 Trace Gas Orbiter - Status Update](#)

H. Svedhem

17:30 – 17:40 [The Nomad Instrument On Board Exomars: Heritage From Previous Missions Towards Breakthrough Science](#)

A.C. Vandaele et al.

17:45 – 17:55 [ACS at Exomars TGO](#)

O. Korablev et al.

18:00 – 18:10 [From Spicam IR To ACS NIR: Dayside Nadir Observations In The Near Infrared](#)

A. Trokhimovskiy et al.

18:15 – 18:25 [New Atmospheric Science With The Mars Insight Lander Mission](#)

A. Spiga et al.

Wednesday, 18:30 – 19:00 **CLOSURE. Round Table: Open questions.**

Wednesday, **19:15 – 19:50 – 20:30* BUS ESAC – MONCLOA – AIRPORT** (*Terminals T123 and T4)



POSTER SESSIONS*

*Both on Tuesday and Wednesday between 16:30 and 17:15.

- [Dust-Devils detection by means of Tomography](#)
C. Aguirre et al.
- [OPTIMAL MINIMUM-ENERGY EARTH-MARS TRANSFER TRAJECTORIES](#)
G. Barderas et al.
- [The UPWARDS user-friendly pipeline for Mars high level scientific data dissemination in PDS4](#)
A. Cala et al.
- [Hydrogen escape at Mars : Comparisons from MGCM-LMD simulations and observations from Mars-Express/SPICAM](#)
J. Chaufray et al.
- [Structural Characterization and Band Assignment of the Raman Spectra Of Oxammite Mineral By Density Functional Theory](#)
F. Colmenero et al.
- [LaRa \(Lander Radioscience\) on the ExoMars 2020 Surface Platform](#)
V. Dehant et al.
- [The MA MISS Experiment on board the ExoMars 2020 Rover](#)
M.C. DeSanctis, G. Bellucci et al.
- [Dependence of the Martian radiation environment on atmospheric depth: modeling and measurement](#)
J. Guo et al.
- [Space Weather at Mars using MSL/RAD measurements combined with heliospheric and particle transport models](#)
J. Guo et al.
- [Synthetic Retrievals of CO₂ from NOMAD and ACS Solar Occultation Spectra](#)
B. Hill et al.
- [The Mars Express/Aspera-3 And Venus Express/Aspera-4 Solar Wind Databases](#)
M. Holmstrom et al.
- [Martian dust devils: Paving the way for analysis of pressure and wind data from MEDA on Mars 2020](#)
R. Hueso et al.
- [Exploring the Atmosphere of Mars with Remote Observations: Activities in Japan for the Belgium-Japan partnership \(AMAVERO\)](#)
Y. Kasaba et al.
- [14 years of Mars' atmosphere monitoring by SPICAM on Mars Express](#)
G. Lacombe et al.
- [Radio Emissions from Electrical Activity in Martian Dust Storms](#)
W. Majid et al.
- [OpenPlanetaryMap: Building the first Open Planetary Mapping and Social platform for researchers, educators, storytellers, and the general public](#)
N. Manaud et al.
- [The Mars Climate Database \(version 5.3\)](#)
E. Millour et al.
- [Electrical Properties of the Dust-Loaded Ionosphere of Mars](#)
G. Molina-Cuberos et al.
- [Spectral classification and MGM-based mineralogical characterization of SAS-corrected OMEGA data: Nili Fossae case.](#)
G. Serventi, G. Bellucci et al.
- [The circulatory impact of dust from dust profile assimilation](#)
P. Streeter et al.
- [CASP-GO auto-DTM: A new paradigm for Martian 3D mapping](#)
Y. Tao et al.
- [Crosslink Occultation Measurements at Mars](#)
S. Tellmann et al.
- [Modification of the retrieval tool JACOSPAR for the Martian limb and solar occultation observations](#)
M. Toyooka et al.
- [Growth of carbonate globules in ALH 84001 Martian orthopyroxenite by transient floods in a chemically variable environment](#)
J.M. Trigo Rodriguez et al.
- [Impact of dust on the retrieval of methane with the SO channel of the NOMAD/ExoMars instrument](#)
L. Trompet et al.
- [Optimization of Martian and Venusian planetary image processing through cloud computing](#)
J. Vazquez-Poletti et al.
- [Martian Atmospheric Dust Dynamics: Modeling And Numerical Computation](#)
M. Velasco et al.



THURSDAY, MARCH 1

INTERNAL MEETING RESTRICTED TO MEX/TGO MEMBERS ONLY

Chairs: *Dmitri titov & Hakan Svedhem*

Thursday, 8:15* – 9:00 **BUS MONCLOA – ESAC** (*from Paseo Ruperto Chapí, <M> Moncloa)

Thursday, 9:15 – 11:00 **MEX/TGO Collaboration discussion**

- Introduction (10 min)
D. Titov, H. Svedhem.
- Analysis of joint observation opportunities (20 min)
A. Cardesin, B. Geiger.
- General discussion (slides from the participants, etc)

Thursday, 11:00 – 11:30 **COFFEE BREAK**

Thursday, 11:30 – 13:00 **MEX/TGO Collaboration discussion**

- Continuation (round table, ...)

Thursday, 13:00 – 13:15 **CLOSURE. Round Table: Open questions.**

Thursday, 13:30 – 14:15 **Bus1 ESAC – Airport** (direct to Terminals T123 and 4)

Thursday, 13:30 – 14:30 **LUNCH**

Thursday, 14:30 – 15:10 – 15:45* **Bus2 ESAC – Moncloa – Airport** (via Madrid, *Terminals T123 and 4)

Programme updated 23 February 2018

BUS SUMMARY

Tuesday, Tuesday,	8:15 – 9:00 18:30 – 19:00	MONCLOA – ESAC (from Paseo Ruperto Chapí, <M> Moncloa) ESAC – MONCLOA
Wednesday, Wednesday,	8:15 – 9:00 19:15 – 19:50 – 20:30	MONCLOA – ESAC (from Paseo Ruperto Chapí, <M> Moncloa) ESAC – MONCLOA – AIRPORT (*Terminals T123 and T4)
Thursday, Thursday, Thursday,	8:15 – 9:00 13:30 – 14:15 14:30 – 15:10 – 15:45	MONCLOA – ESAC (from Paseo Ruperto Chapí, <M> Moncloa) ESAC – Airport (direct to Terminals T123 and 4) ESAC – Moncloa – Airport (via Madrid, *Terminals T123 and 4)



MARS EXHIBITION AND COCKTAIL

EXPOSICIÓN

MARTE. LA CONQUISTA DE UN SUEÑO

 Espacio Fundación Telefónica
C/ Fuencarral, 3, Madrid

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