ID de Contribution: **8** Type: **Oral presentation**

Calibration and preparation of MIRS instrument observations for the JAXA MMX space mission

mercredi 10 février 2021 14:15 (15 minutes)

MMX (Martian Moons eXploration) is the first sample return mission from the Phobos satellite (2024) with detailed exploration of the Martian system.
The objective is to determine the origins of the Mars's moons in order to address the roles of small bodies in the formation of planetary systems in the habitable zone.
MMX will carry several scientific instruments, including a rover and a sampling system, which will be returned to Earth at the end of the mission (2029).
MIRS (MMX InfraRed Spectrometer) is an imaging spectrometer working from 0.9 to 3.6 µm with wavelength resolution of 20 nm. Its developed by LESIA (Laboratoire d'Etudes Spatiales et d'Instrumentation en Astrophysique) and other French laboratories (LAB, LAM,LATMOS, OMP), and the CNES.
MIRS will provide global spectral maps of Phobos and Deimos to detect the surface composition and to support the sampling site selection. MIRS will study Mars atmosphere with particular attention to spatial and temporal changes as clouds, dust storm and water vapor.
The objective of my thesis is to carry out the performance and the calibration of the MIRS detector and instrument.

Field

Instrumentation

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Classification de Session: Talk

Classification de thématique: Astrophysics