

Séminaire SCOPI Paris-Saclay

Philippe Lognonné (Institut de Physique du Globe de Paris)

Jeudi 12 septembre 2019 à 11h00

SEIS/InSight on Mars : first 9 months of Mars seismic monitoring

InSight landed on Mars on November, 26th, 2018 and deployed on the Martian in the following 2 months the SEIS experiment, a 6 axis seismometer protected by several layers of thermal protection in addition to a Wind and Thermal Shield. This robotic deployment is a first in Planetary Science and it is also the first time that a complete geophysical station is deployed, with seismic, magnetic, geodetic, heat flow and weather sensors.

We present the challenge faced successfully by the InSight team in the SEIS deployment and provide an overview of the first observations made by the experiment after 9 months on Mars, including the first detection of Marsquakes and their analysis for determining the first constraints on Mars interior structure and Mars seismicity.



SEIS a few minutes before the Wind and Thermal Shield final deployment (© NASA/JPL)

Bio: Ph. Lognonné is Professor at University of Paris and Planetary geophysicist at the Institut de Physique du Globe de Paris. His background is seismology and planetary sciences. He is Principal Investigator of the SEIS experiment onboard NASA 2018 InSight mission, which landed on Mars on November, 26th, 2018.

He also contributed to the reprocessing of the Apollo lunar seismic data, including with new estimations of the lunar crustal thickness, and lead several projects in ionospheric seismology. He is Director of the Planetary Space Science Laboratory at the Institut de Physique du Globe de Paris, Senior Member of the Institut Universitaire de France, Fellow of the American Geophysical Union and has been distinguished visiting scientist at the Jet Propulsion Laboratory, as well as visiting Professor at UC Los Angeles and Miller Institut of UC Berkeley.



Auditorium Pierre Lehmann, Bât.200 - Campus Universitaire d'Orsay
Le séminaire sera précédé d'un café/thé à 10h45

Le LABORatoire d'EXcellence Physique des 2 Infinis et des Origines (P2IO) organise conjointement avec les départements Physique des 2 Infinis (P2I) et Sciences de la planète et de l'Univers (SPU) de l'Université Paris-Saclay une série de "Séminaires Communs des Origines et de la Physique des 2 Infinis" (SCOPI). Ces séminaires s'adressent à un large public.