



Postdoctoral position at the Institut de Physique du Globe de Paris

The SEIS experiment is now fully operational on Mars following the successful landing of the InSight mission in late November, 2018 and the installation of the seismometer and its wind protection on the Martian surface in early 2019. The Institut de Physique du Globe de Paris (IPGP), PI Institution of SEIS, is searching candidates for a two years postdoctoral position. This position will be based in the Campus Spatial Facility, at University Paris Diderot, Paris Rive Gauche campus.

After more than one year of operation, the InSight mission has now recorded several hundred of events and has collected long time series for the 6 seismic channels and pressure/wind channels. These data sets enable now systematic data analysis, enabling stack/cross-correlation on both events and noise and enhancement of the signal to noise thanks to pressure decorrelation and other noise correction technics.

The goal of this postdoc will be to develop automatic seismic signal processing technics on the InSight SEIS data pipeline, on both the detected events and on noise, and to initiate waveform inversions for 1D and 3D structure with local and regional events, including through the search of long period signals associated to either events or to continuous excitation of Mars micro-seismic noise.

The candidate will therefore have to demonstrate his/her skill in broadband (0.1-10 Hz) seismic data processing, and must be curious as the SEIS Mars data are new with respect to Earth seismic standard. Experience in seismic modelling will be also welcome, as well/or is site effects modelling and/or crustal seismic exploration.

About 20% of the postdoc activities will be devoted to one of the weekly SEIS operation activities.

The position is available for two years, starting April 2020. It will remain open until filled. Salary follows French university standard and depends on the research experience since the PhD defense. All basic insurance benefits are provided.

The Postdoc, funded by the Mars Geophysics for InSight (MAGIS) ANR funded project, will join the IPGP SEIS team, a group of about 10 scientists, postdoc, PhDs and engineers. Although most of the activity will be held in the Planetary and Space Science Team of IPGP, there will be strong interaction with the Seismology team of IPGP.

Applicants should send a cover letter, curriculum vitae, statement of research interests and contact information for a minimum of two references.

For further information or to submit an application contact: Pr. Philippe Lognonné (lognonne@ipgp.fr), email subject : InSight MAGIS postdoc position.