



Postdoctoral position at the Lagrange Observatory on the Martian crust structure and evolution, as seen by insight and other Mars mission.

One of the key objectives of the InSight mission is to constrain how the crust of Mars formed and evolved over time, from the initial differentiation of the planet to subsequent modification by magmatic and impact processes. From seismic measurements, the InSight mission will provide definitive information about the deep structure of the crust of Mars. We expect to determine the crustal thickness at the InSight landing, to detect any large-scale layering that might be present within the crust, and to quantify scattering processes that may be a result of impact fracturing of the crust.

We search for a motivated postdoc who will investigate global processes concerning crust formation, bulk crustal composition, and magmatic and impact modification of the Martian crust. Depending on the expertise of the candidate, projects could involve thermal evolution modeling, remote sensing studies of bulk crustal composition, studies of the bulk composition of Mars using sample data, gravity studies of the crust and upper mantle, or seismic methods that could constrain lateral variations in crustal thickness.

The candidate would work closely with Mark Wieczorek at the Observatoire de la Côte d'Azur, Nice, and Chloé Michaut at the Ecole Normale Supérieure in Lyon. Interested candidates should respond by email (mark.wieczorek@oca.eu) with a letter of motivation describing how their expertise would fit into one of the above research themes, in addition of a CV and contact for 2 references.