

The Institute of Geophysics at ETH Zurich is involved since long time in the development of the first space-borne gravitational waves observatory with the participation to LISA Pathfinder and LISA missions. Gravitational waves (GW) are one of the hottest topics in modern Physics; Einstein's General Theory of Relativity naturally predicts them, there are indirect proofs of their existence but any attempt to directly detect a GW has been vain till now. Space-borne gravitational waves observatories promise to revolutionize astronomy using gravitational waves as a new messenger for the exploration of the entire universe. We invite motivated and excellent candidates to apply for a

PhD position in Science of Measurement for Space-borne Gravitational Waves Observatories.

The PhD research activity will be part of the efforts of a wide international community in paving the way to the first space-borne gravitational waves observatory. The candidate will participate to LISA Pathfinder data analysis (launch scheduled for December 2015), which includes system identification, noise analysis and statistical processing of mission data. Moreover the candidate will be involved in the process of knowledge transferring from LISA Pathfinder to LISA (Laser Interferometer Space Antenna), with the objective of developing new data analysis strategies for the calibration experiments on board of LISA spacecrafts. This is a unique opportunity to work with real data from the LISA Pathfinder mission.

The work will be conducted at the Institute of Geophysics at ETH Zurich under the supervision of Prof. Domenico Giardini and Dr. Luigi Ferraioli and in close collaboration with the group of Prof. Philippe Jetzer at University of Zurich.

We are looking for a highly motivated candidate with a master degree in Experimental Physics or Engineering. A strong interest in data analysis and statistical signal processing is required. Previous knowledge of MATLAB computing language would be an advantage. English is the working language in our group.

For further information please contact by e-mail Dr. Luigi Ferraioli luigi.ferraioli@erdw.ethz.ch. Detailed information on LISA Pathfinder and LISA missions can be found at: <http://sci.esa.int/lisa-pathfinder/> and <https://www.elisascience.org/>.

Please submit your application on-line (www.jobs.ethz.ch) including a cover letter, a detailed CV and the contact information of two referees. Please address your application to ETH Zürich, Ms. Maja Bügler, Human Resources, CH-8092 Zürich. The evaluation of applications will continue until the position is filled.