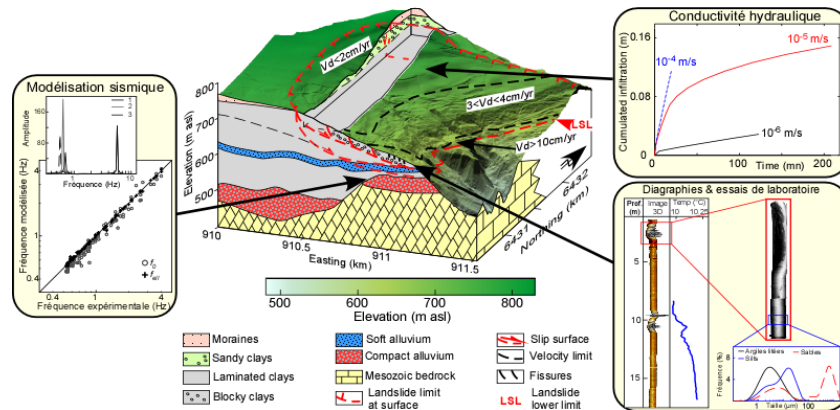


CYCLE OF SEMINARS IN APPLIED GEOPHYSICS

Prof. Grégory Bièvre - Université Grenoble Alpes



INTEGRATION OF GEOPHYSICAL AND GEOTECHNICAL METHODS TO CHARACTERIZE AND MONITOR EARTHSLIDES

This seminar will present a combined approach using both classical prospecting techniques (geology, geotechnics, hydrogeology, etc.) and geophysical methods (encompassing remote sensing) to characterize and monitor landslides. This approach has been successfully used on several landslides (rocky and clayey) to characterize their geometry, their internal properties and to evaluate their controlling factors. Special attention will be paid to emerging monitoring techniques (ground geophysics and remote sensing) and recent results will be discussed.

Thursday, 24 November 2016, 2:00pm – 6:00pm. Room U1.1 - [MO 51] - Via Campi 103

2D GEOPHYSICAL METHODS AND NUMERICAL MODELLING APPLIED TO THE DETECTION OF LEAKAGES WITHIN EARTH DAMS

This seminar will present recent results regarding the combined use of geological, geotechnical and geophysical techniques for the characterization of earth dams. These structures are prone to internal erosion and piping phenomena which can lead to breaching and failure. Recent developments regarding numerical modelling combined with geophysical techniques to better assess the conditions of these linear structures will be presented. Emerging monitoring techniques using ambient vibrations and cross-correlation techniques will be also discussed.

Wednesday, 21 December 2016, 2:00pm – 6:00pm. Room U1.1 - [MO 51] - Via Campi 103



Prof. Grégory Bièvre is part of the Research Team *Géophysique des Risques et de l'Environnement* in the Earth Science Institute (ISTerre) at the Université Grenoble Alpes (France). His research interests are focused on the characterization of the mechanical and hydrological variability of the shallow subsurface with an approach combining multiple sources of data collected with geological, geotechnical, hydrological, geophysical and topographical surveys. He has developed methodologies to study sedimentary rock formations, landslides, anthropogenic structures (geotechnical and archaeological). He is in charge of the Avignonet Landslide site in the framework of the Multidisciplinary Observatory of unstable Slopes (OMIV).