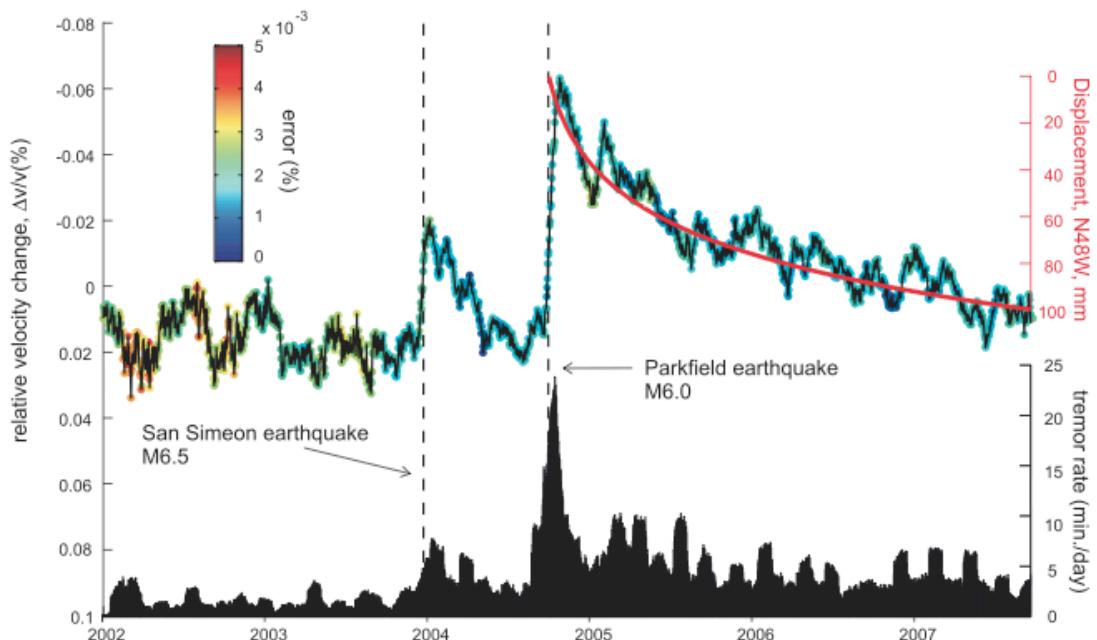


The LSMS is pleased to invite you to a seminar given by

**Prof. Michel Campillo**

**Thursday, March 29<sup>th</sup> at 12:15, room GC A3 30**

## **Monitoring rock properties with the ambient seismic noise: Evidences for non-linear response of the crust to weak deformations**



**Prof. Michel Campillo**

Professor ‘Classe Exceptionnelle’ at Université Joseph Fourier,  
 Institut des Sciences de la Terre  
 Grenoble, France

We use the ambient noise to image the geological structures and to monitor slight changes in the elastic properties of the crust. This recently developed technique takes advantage of the huge quantity of data provided by continuous digital seismic networks. We discuss the principle of the method and show its applications for imaging at different scales. We present examples of temporal changes of seismic speeds associated with volcanic eruptions, earthquakes and transient deformation ('creep') at depth. We discuss the possible origins of these changes.