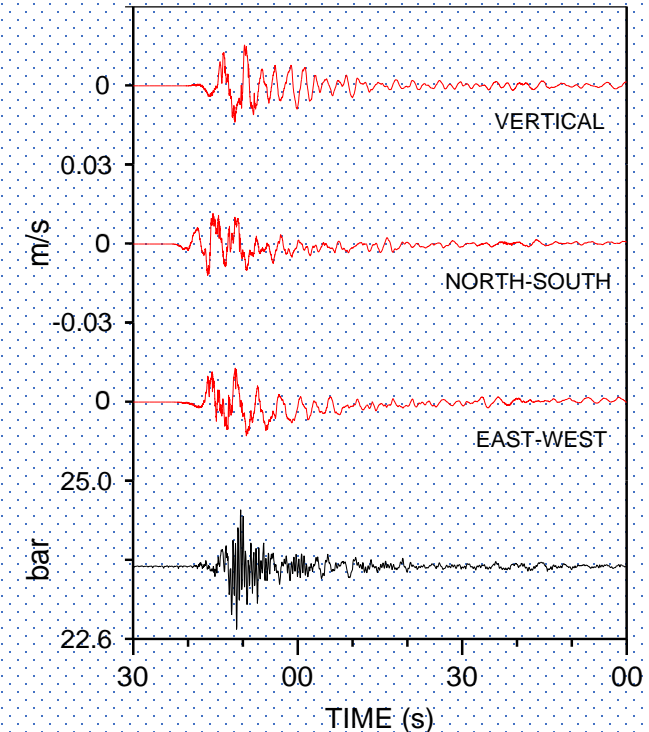
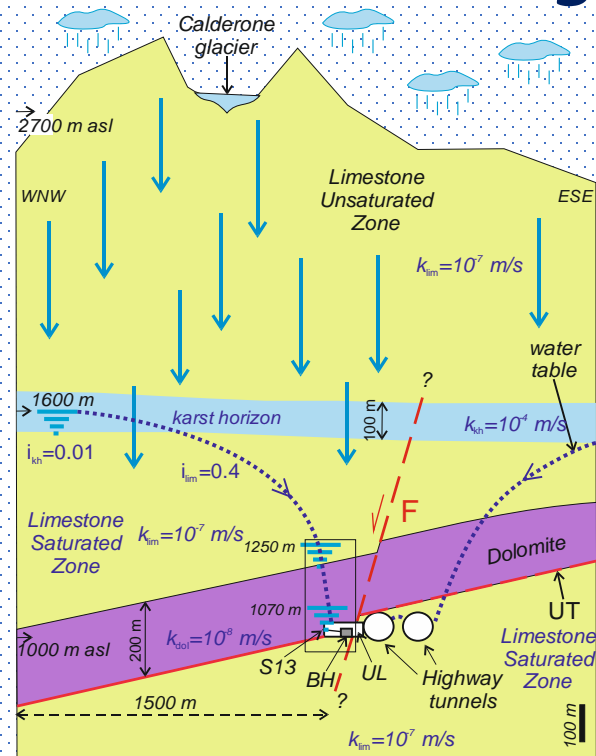


Prima, durante e dopo il terremoto di Amatrice: segnali dalle acque sotterranee del Gran Sasso

Gaetano De Luca
INGV, L'Aquila

22 marzo 2017 – ore 14.30
Facoltà di Ingegneria - Montelucio di Roio
Blocco A - aula A-1.1



Abstract. Since May 2015, hydraulic pressure, temperature and electrical conductivity of groundwater have been continuously monitored in the 200 m-long horizontal S13 borehole placed close to the deep underground INFN laboratory (Gran Sasso aquifer, Central Italy). A high sampling rate of the physical quantities up to 50 Hz was achieved with a 3-channel 24-bit ADC. From May 2015 up to now we registered hydraulic pressure signals from many earthquakes at different surface distances (from 12000 to 30 km) and different magnitudes. We present the results obtained for the Amatrice mainshock and the subsequent mainshocks, comparing the hydroseismograph recorded by the S13 hydraulic pressure device to the time history recorded at the GIGS seismic station, both located in the deep core of the Gran Sasso carbonate aquifer.