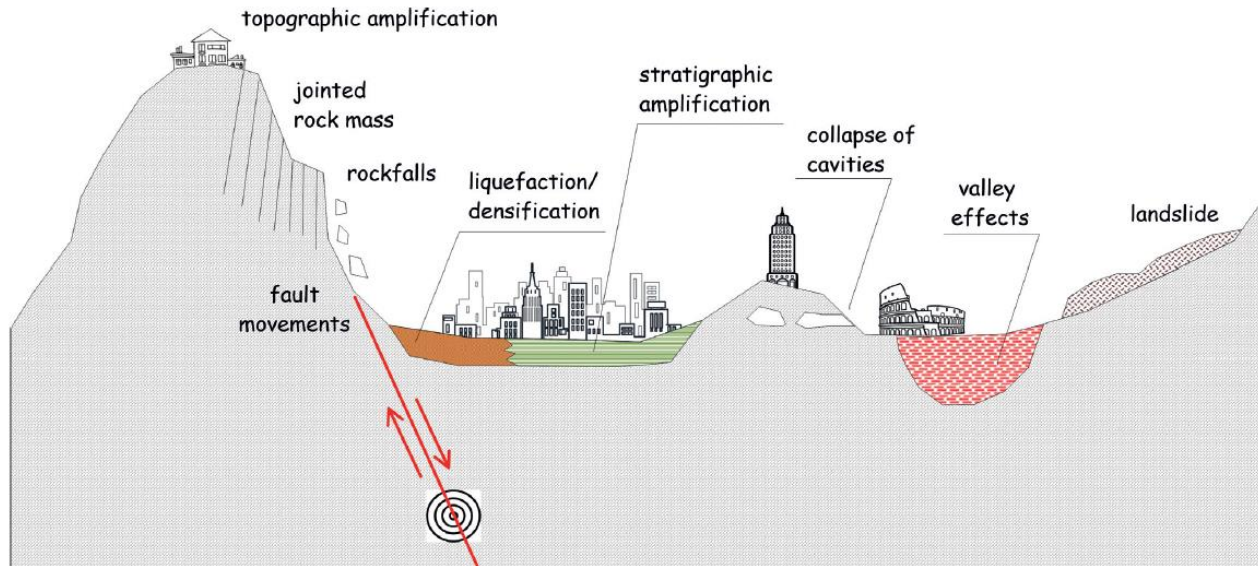




Course announcement

"Multidisciplinary studies for local seismic hazard assessment"



Proff. A. Pizzi, A. Pagliaroli, S. Amoroso, G. Vessia

20 hours

Classes will be in English/Italian

Compulsory attendance

Final essay based on a set of questions provided on the first day.

ABSTRACT

When a site is subjected to seismic shaking, the earthquake effects consist of transient or permanent phenomena: the first display themselves in terms of modifications in amplitude, frequency content and duration of ground motion (local amplification), while the latter involve ground instabilities such as landslides, liquefactions, seismic compression, cavity collapse and fault displacements. These phenomena defining the local seismic hazard, vary from place to place depending on the local geology and morphology (i.e. the local conditions). The quantitative assessment of local seismic hazard is a multidisciplinary process involving different disciplines mainly Geology, Engineering Geology, Applied Geophysics, Applied Seismology, Structural and Geotechnical Engineering.

The course presents, with a multidisciplinary approach, the main steps of local seismic hazard assessment including fault characterization, definition of subsoil model from geological, geotechnical and geophysical data, quantitative evaluation of soil amplification and ground instabilities through simplified and advanced dynamic analyses.



✉ **Register** sending email to:

Tea.taraborelli@unich.it & [massimiliano.pepe@unich](mailto:massimiliano.pepe@unich.it) (in cc)

*For those not at University of Chieti-Pescara it is possible to follow the short course online:
specify request when you register.*

TIMETABLE AND TOPICS			
Date and time		Topic	Teacher
15/04/2024	09-12	Geotechnical site investigations	Amoroso
15/04/2024	15-18	Geological model for Microzonation studies	Pizzi
16/04/2024	09-11	Active and capable faults	Pizzi
16/04/2024	11-13	Soil dynamics	Pagliaroli
16/04/2024	15-18	Site response analyses - part I	Pagliaroli
17/04/2024	09-11	Liquefaction	Amoroso
17/04/2024	11-13	Site response analyses - part II	Vessia
17/04/2024	14-17	Case studies	Vessia