



## Session 30

### New challenges for urban engineering seismology

Conveners:

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Devastating earthquakes and induced seismicity near infrastructures must become in the coming decades the centrepiece of analysis in reducing risk and increasing resilience, facing up to global urban population growth and the concentration of wealth in cities. The accurate forecasting of seismic ground motion and response of structures are key issues in reduction of seismic urban risk. A comprehensive set of transferable skills must be developed through innovative and interdisciplinary joint research projects between academic and non-academic partners on the prediction of seismic hazard in urban areas considering low probability/high consequences events and induced seismicity related to the exploitation of energy resources; the seismic ground motion prediction within the non-freefield urban area; the coupling between ground motion and structures/infrastructures responses for natural and induced seismicity including time dependency vulnerability; and the systemic risk of interconnected urban systems. The aim of this session is to provide a multi-disciplinary session, in particular for young scientists, in order to share their individual projects (like the ITN MSCA URBASIS EU) related to the urban seismology domain. Advanced capacities in modelling and predicting seismic impact in cities must be captured putting the urban environment as the centrepiece of URBASIS.