

Soil-structure interaction in OpenSees: strategies, applications and perspectives (SSI-OS)

International Advanced School – 9-11 September 2024 – Assisi (Italy)

OpenSees is an evolving numerical framework for advanced assessment of civil engineering structures against natural hazards, in which soil-structure interaction can be simulated through multiple levels of complexity. We will explore soil-structure modelling in OpenSees, focussing on critical issues of the implementation. The development of nonlinear dynamic analyses is the main goal of this path. To this end, new-generation approaches for assessing the dynamic performance of soil-structure systems will be described and techniques to implement new features in OpenSees will be discussed, of interest for both Users and Developers. The discussion will be extended to the use of tools for regional analysis and artificial intelligence-based assessment. Several example applications will be provided, supported by hands-on experience and working groups.

More information on the contents and attendance modalities can be found in the flyer and full programme attached.

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