soil-structure interaction in OpenSees

strategies, applications and perspectives

Winter school

7-10 February 2023

Soul and goal

The increasing development of OpenSees makes it particularly suitable towards multi-disciplinary approaches. It meets the need to simulate the dominant soil-structure interaction features in the prediction and control of structural vibration under dynamic loading conditions.

A four-day workshop to explore the basics and advanced applications of soil-structure modelling in OpenSees, focussing on critical issues of the implementation and discussing possible solutions.

A meeting point to interact within the world of dynamics of soil-structure systems, for sharing experience and pointing to new horizons.

Casa San Juan de Avila

Via Pietro de Francisci, 00165, Rome (Italy)

a privileged location in the heart of Rome, well connected by private and public transport.

the House is surrounded by historic places and parks, such as the Vatican City and Villa Doria Pamphilj

Organising Committee


Davide Gorini


Luigi Callisto


Paolo Franchin


Tony Fierro

Speakers

Dr. Davide Noè **Gorini**
Prof. Pedro **Arduino**
Prof. Luigi **Callisto**
Prof. Frank **McKenna**
Dr. Domenico **Gallese**
Prof. José **Abell**
Prof. Federico **Pisanò**
Prof. Paolo **Franchin**
Prof. Christopher **McGann**
Eng. Giuseppe **Lombardi**
Prof. Anastasios **Sextos**
Dr. Tony **Fierro**
Dr. Tim **Cockerill**
Dr. Andrea **Marchi**
Dr. Amedeo **Flora**
Dr. Massimo **Petracca**
Eng. Pasquale R. **Marrazzo**

ASSOCIAZIONE NAZIONALE ITALIANA DI INGEGNERIA SISMICA
ANIDIS
Italian National Association of Earthquake Engineering

AGI Associazione Geotecnica Italiana

SCIENTIFIC PROGRAMME

7-10/02/2023

FEBRUARY 7 Tuesday

Opening methods of analysis for soil-structure interaction problems
L. Callisto

Session 1 basics of modelling soil-structure interaction in OpenSees
D.N. Gorini, G. Lombardi

Session 2 pre- and post-processing large domains
D.N. Gorini, D. Gallese, G. Lombardi, M. Petracca

FEBRUARY 8 Wednesday

Session 3 parallel computing: general settings and optimization
D.N. Gorini, J. Abell, D. Gallese, T. Cockerill, F. McKenna

Session 4 developing OpenSees
P. Arduino, C. McGann, T. Fierro, J. Abell, D. Gallese, D.N. Gorini

FEBRUARY 9 Thursday

Session 5 geo- and structural materials: calibration and use
P. Arduino, C. McGann, T. Fierro, D.N. Gorini, A. Flora

Session 6 construction sequence and boundary conditions
D.N. Gorini , D. Gallese, J. Abell, A. Marchi

FEBRUARY 10 Friday

Session 7 useful numerical procedures
D.N. Gorini, D. Gallese, G. Lombardi

Session 8 OpenSees and soil-structure interaction: an ever-broader horizon
T. Fierro, G. Lombardi, F. Pisanò, A. Sextos, D. Gallese, D.N. Gorini, A. Marchi, P.R. Marrazzo

registration & fees

Registration to the school is mandatory through this *form*. Registrations will be accepted subject to availability (maximum number of attendees = 100). The payment of the fees can be made after the acceptance of registration and, however, by December 30.

payment	*school attendance*	*board & lodging (4 days)*
by Nov 30	€ 250	€ 360
Dec 1 to 30	€ 250	€ 400