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DICEAA
Dipartimento di Ingegneria
Civile, Edile-Architettura
e Ambientale

Ph.D.ICEAA

Ph.D. Program in Civil, Building Construction
and Environmental Engineering

Coordinator: Prof. Marcello Di Risio

Centrifuge Modelling for Civil Engineers: applications and perspectives

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University of L'Aquila

Abstract

The seminar presents the principles of centrifuge modelling, starting with a brief introduction to the circular motion and scaling laws that relate centrifuge model to field structures.

As an example of application, the experience gained from a real experiment on the dynamic response of soil embankments carried



out at the Center for Geotechnical Modelling of the University of California at Davis is described. The obtained results are discussed and finally compared with those obtained through a numerical model and an advanced constitutive model for soil liquefaction problems.

14/04/2023 ore 11:30 – 12:30

Online on Teams code "br2yu06"



About the Speaker



Anna Chiaradonna is Research Assistant in Geotechnical Engineering at the University of L'Aquila since 2019.

Her research focuses on numerically and experimentally studying ground failure due to earthquake-induced liquefaction and its mitigation.

Her work on the prediction of excess pore pressure with different approaches in the assessment of liquefaction triggering and consequences on the built environment has been developed during the participation to several numerical benchmarks and international projects funded from the National Research Council, European H2020, Fulbright Research Program, Italian Ministry of University and Research.

14/04/2023 ore 11:30 – 12:30

Online on Teams code "br2yuo6"