meeting link

EARTH SYSTEMS SEMINARS

RELIABLE SEISMIC HAZARD INPUTS FOR ENGINEERING PRACTICE

WHAT'S THIS ABOUT?

Recent advancements in ground motion simulation have led to the development of diverse numerical frameworks that balance accuracy and computational efficiency while addressing the scarcity of recorded data, particularly in seismically under-monitored regions and areas of seismic gaps.

This seminar examines the validation of simulated records across diverse tectonic settings and discusses the advantages of stochastic simulation frameworks in reproducing realistic seismic behavior. Beyond seismological validation, the presentation addresses engineering validation through the analysis of structural demand parameters in single- and multi-degree-of-freedom (SDOF/MDOF) systems. The discussion highlights how simulation outputs can provide reliable seismic inputs for engineering design, performance assessment, and multi-hazard analysis, thereby bridging the gap between seismic hazard modeling and structural response evaluation. These validated simulations also offer valuable insights for resilience planning and multi-hazard risk reduction, contributing to the development of safer and more sustainable infrastructure in earthquake-prone regions.

Shaghayegh Karimzadeh
(University of Minho)

November 19
Wednesday: 13h00
in IDL room 1.1.37 (C1) or online
Teams Meeting ID: 347 677 275 084 0
Passcode: HS6Yg2Cz

calendar link

INSTITUTO DOM LUIZ
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