

November 14-15, 2023

METIS WORKSHOP ON SITE-SPECIFIC SEISMIC HAZARD ASSESSMENT



Background

Site-specific hazard studies for critical facilities have been driving Probabilistic Seismic Hazard Analysis (PSHA) since its inception. Throughout the years, hazard analyses at regional and national levels incorporated many procedural and methodological advancements initially used in detailed, single-site investigations.

METIS (<https://metis-h2020.eu/>) is an EU Horizon 2020 project. One of its main goals is to develop and improve tools and methodologies employed in seismic safety assessments of nuclear reactors and translate this research into practice for industry use.

Purpose

In this workshop, we aim to combine presentations illustrating some of the main achievements of METIS, particularly on the hazard side, with expositions describing recent methodological advancements relevant to site-specific studies.

AGENDA

METIS workshop on site-specific seismic hazard assessment workshop

NOVEMBER 14

From	To	Title	Presenter
09:00	09:45	Validation of PSHA Models Using Precariously Balanced Rocks	Anna Rood
09:45	10:30	Earthquake surface rupture and Probabilistic Fault Displacement Hazard Analysis (PFDHA)	Paolo Boncio
10:30	11:00	Coffee break	
11:00	11:45	Challenges involved in fault-based seismic hazard assessment	Oona Scotti
11:45	12:30	Ground-motion modelling for site-specific hazard assessment	Peter Stafford
12:30	14:00	Lunch	
14:00	14:45	Non-ergodic ground-motion modelling	Norman Abrahamson
14:45	15:30	Simulated ground motion database for METIS case study	Luis Alvarez
15:30	16:00	Coffee break	
16:00	16:45	Incorporation of site response in PSHA	Adrian Rodriguez-Marek
16:45	17:30	Quantifying and Modeling of Site Effects: Recent Developments and Challenges	Marco Pilz

NOVEMBER 15

From	To	Title	Presenter
09:00	09:45	Vector Valued Probabilistic Seismic Hazard Analysis	Irmela Zentner
09:45	10:30	New OQ Features developed within the METIS project	Marco Pagani
10:30	11:00	Coffee break	
11:00	11:45	Uncertainty in fragility and response hazard curves due to ground motion record selection	Nevena Sipic & Pablo Inarritu
11:45	12:30	IAEA initiatives related to seismic hazard analysis for nuclear installations	Zeynep Gulerce
12:30	14:00	Lunch	
14:00	14:45	Challenges in evaluating PSHA results based on observation	Emmanuel Viallet
14:45	15:30	Comparing Seismic Hazard Models Against Instrumental Data: Theoretical and Practical Considerations	Graeme Weatherill