

Analysis and Mitigation of Risks in Infrastructures INFRARISK-

9th Summer School Workshop
Instituto Superior Técnico, 7th July 2023

Location: Room 4.41, Civil Building

Program

10.00 Opening Session

António Pinheiro
Head of DECivil, IST

Rita Bento
Director of the Doctoral Programme INFRARISK-

Desmond Hartford
Member of the Evaluation Committee

14:30

Keynote Lecture

Chairperson: Rita Bento

Needs and Challenges in Developing the Italian Seismic Risk
Assessment of the School Buildings Stock

Serena Cattari (Invited Speaker)

10.20 Research Project Presentations – Earthquake Engineering

Chairpersons: Paulo Lourenço, Xavier Romão

BIM-Based Methodology for The Seismic Performance Assessment
of Existing URM-RC Buildings

Gonçalo Lopes

Supervision: Romeu Vicente (U Aveiro), Miguel Azenha (U Minho),
Tiago Ferreira (UWE Bristol)

Empirical Evidence-Based Semantic Models for Seismic
Vulnerability Assessment of Masonry Historical Buildings: Lessons
from Mexican Experiences

Rafael Ramírez Eudave

Supervision: Tiago Ferreira (UWE Bristol), António Formisano (UNINA)

Effect of Earthquake Risk on the Real Estate Market – An
Application to Lisbon

João Fragoso Januário

Supervision: Carlos Oliv. Cruz (IST), Humberto Varum (FEUP), Vítor
Sousa (IST)

15:30

Discussion, Final Recap and Closing Session

Rita Bento

Carlos Sousa Oliveira

Laura Caldeira

Paulo Lourenço

Romeu Vicente

Xavier Romão

Members of the INFRARISK-, Board of Studies

Desmond Hartford

Member of the Evaluation Committee

11:20 Coffee break

12:00 Research Project Presentations – Earthquake Engineering & Infrastructures

Chairpersons: Laura Caldeira & Romeu Vicente

Increasing Robustness of Critical Infrastructures Assessment Using
Artificial Intelligence and Structural Monitoring

Fabiana Navia Miranda

Supervision: João Santos (Ventient Energy), Juan Mata (LNEC), Xavier
Romão (FEUP)

Development of Multi-Hazard Risk Indicators for Immovable
Cultural Heritage: Seismic Vulnerability Assessment

Luis Gerardo Flores Salazar

Supervision: Xavier Romão (FEUP), Rui Figueiredo (IUSS Pavia)

Experimental Characterization of Embankment Failure by
Overtopping

Teresa Alvarez

Supervision: Rui Ferreira (IST), Teresa Viseu (LNEC)

13.00 Lunch break