

# Analysis and Mitigation of Risks in Infrastructures INFRARISK-

3<sup>rd</sup> Summer School Workshop  
28<sup>th</sup> July 2017

## Program

9:30	<b>Opening Session</b> Eng. Carlos Pina <i>President of LNEC</i> Eng. Laura Caldeira <i>Head of the Department of Geotechnics of LNEC</i> Prof. Rita Bento <i>Director of the Doctoral Programme INFRARISK-</i> Prof. Atilla Ansal <i>Member of the Evaluation Committee</i> Dr. Desmond Hartford <i>Member of the Evaluation Committee</i>	
9:50	<b>Research Project Presentations – 3<sup>rd</sup> year students</b> Chairpersons: Prof. Paulo B. Lourenço, Eng. Laura Caldeira <b>Probabilistic Seismic Vulnerability Assessment of “Gaioleiro” Buildings</b> Ana Simões <i>Supervision: Rita Bento (IST), Sergio Lagomarsino (U Genova), Paulo B. Lourenço (U Minho)</i> <b>How to identify critical hotspots in coastal zones? Challenges and solutions</b> Pedro Narra <i>Supervision: Carlos Coelho (U Aveiro), Francisco Eduardo da Ponte Sancho (LNEC)</i> <b>Robustness of multi-storey timber buildings in seismic regions</b> Leonardo Rodrigues <i>Supervision: Jorge Branco (U Minho), Luís Neves (U Nottingham)</i> <b>Robustness of transportation networking systems – Application to a case study</b> Hugo Guimarães <i>Supervision: José Campos e Matos (U Minho), Dan Frangopol (U Lehigh), António Abel Henriques (FEUP)</i> <b>Statistical analysis of the effect of the angle of seismic incidence on probabilistic inelastic seismic demand</b> Despoina Skoulidou <i>Supervision: Xavier Romão (FEUP)</i> <b>The influence of correlated spectral parameters in risk analysis of scour protections</b> Tiago Ferradosa <i>Supervision: Francisco Taveira Pinto (FEUP), Luciana Neves (FEUP), Teresa Reis (LNEC)</i>	
11:20	<b>Coffee break</b>	
11:40	<b>Keynote Lecture</b> Chairpersons: Eng. Alfredo Campos Costa, Eng. António A. Correia <b>An application of Natural Hazards Risk Modelling: Wine!</b> Dr. James Daniell <i>Invited Speaker</i>	
12:40	<b>Lunch break</b>	
14:10	<b>Research Project Presentations – 1<sup>st</sup> year students</b> Chairpersons: Prof. Rita Bento, Prof. Rui Calçada <b>The Influence of Timber Floors on Masonry Structures</b> Maria Pia Ciocci <i>Supervision: Paulo B. Lourenço (U Minho)</i> <b>Experimental investigation and numerical modelling of dyke failure</b> Teresa Alvarez <i>Supervision: Teresa Viseu (LNEC), Rui Ferreira (IST)</i>	
14:50		<b>Risk Analysis of Transmission Lines Systems to Natural Hazards with emphasis on Earthquakes and Extreme Winds</b> Fábio Paiva <i>Supervision: Luís Guerreiro (IST), Rui Carneiro de Barros (FEUP)</i> <b>Risk-Based Analysis of Bridge Scour Prediction with Live Bed Conditions</b> Ana Margarida Bento <i>Supervision: Teresa Viseu (LNEC)</i>
15:35		<b>Research Project Presentations – 2<sup>nd</sup> year students</b> Chairpersons: Prof. Rita Bento, Prof. Rui Calçada <b>Fragility Curves for Concrete Pre-seismic code Portuguese Building stock</b> Sanam Moghimi <i>Supervision: Alexandra Carvalho (LNEC), Paulo B. Lourenço (U Minho)</i> <b>Optimization of numerical modelling in the context of sensitivity analysis</b> Bruno Oliveira <i>Supervision: Rodrigo Maia (FEUP), Francesco Ballio (Politecnico di Milano)</i> <b>Categorization of bridges according to dynamic behavior and definition of a framework for optimization</b> Vitor Camacho <i>Supervision: Mário Lopes (IST), Carlos Sousa Oliveira (IST)</i>
15:55		<b>Coffee break</b>
		<b>Research Project Presentations – 2<sup>nd</sup> year students</b> Chairpersons: Prof. Carlos Sousa Oliveira, Prof. Romeu Vicente <b>Earthquake Risk Mitigation of Urban Cultural Heritage Assets</b> Rui Maio <i>Supervision: Romeu Vicente (U Aveiro), Sergio Lagomarsino (U Genova)</i> <b>Stability analysis of a SDOF system in hybrid simulation with a uni-axial shake table</b> Gidewon Tekeste <i>Supervision: António A. Correia (LNEC), Anibal G. Costa (U Aveiro)</i> <b>Risk management applied to cultural heritage buildings. The effect of soil settlements and vibrations induced by underground structures</b> Georgios Karanikoloudis <i>Supervision: Paulo B. Lourenço (U Minho), João Bilé Serra (LNEC)</i> <b>Seismic vulnerability assessment of old frame-wall buildings in Lisbon</b> Claudia Caruso <i>Supervision: Rita Bento (IST), José Miguel Castro (FEUP)</i>
16:55		<b>Discussion: Board of Studies and Researchers/Scholars</b>
17:15		<b>Closing Session</b> Eng. Laura Caldeira Prof. Carlos Sousa Oliveira <i>Members of the INFRARISK-, Board of Studies</i> Prof. Atilla Ansal <i>Head of the Department of Civil Engineering, Ozyegin University, Istanbul, Turkey</i> Dr. Desmond Hartford <i>Principal Engineering Scientist, BC Hydro, Vancouver, Canada</i> Dr. James Daniell <i>Senior Research Scientist, CEDIM – KIT, Karlsruhe, Germany</i>
17:30		<b>Visit to LNEC shake table facility</b>

