



## WORKSHOP PROGRAM

### DAY 1 15<sup>th</sup> DEC

#### 10h00 | **OPENING CEREMONY**

**Professor Saldanha Matos** (President of DECivil)

**Professor Kyriazis Pitilakis** (President of EAAE)

**Professor Andreas Kappos** (Secretary – General of EAAE)

**Professor Mario de Stefano** (Coordinator of WG8 – EAAE)

**Professor Rita Bento** (Chair of 9th EWICS)

#### 11h00 | **KEYNOTE** Chair: **Rita Bento**

Irregularities in RC buildings: Perspectives in current seismic design codes, difficulties in their application and further research needs

**Professor Humberto Varum**, University of Porto

#### 11h45 – 12h00 | **MORNING BREAK**

#### **SESSION 1** Chairs: **Mario de Stefano** (Italy) | **Ana Simões** (Portugal)

**12h00** | Seismic enforced displacement-based pushover analysis on irregular in-plan R/C multi-storey buildings


**Triantafyllos Makarios, Athanasios Bakalis**

**12h15** | Design approach for an irregular hospital building in Bucharest

**Dietlinde Köber, Paul Semrau, Felix Weber**

**12h30** | Seismic capacity of Eurocode 8 compliant RC frames with irregular vertical distribution of stiffness

**Francesca Barbagallo, Melina Bosco, Aurelio Ghersi, Edoardo Marino, Pier Paolo Rossi**



**12h45** | Rotational seismic effects on irregular in elevation buildings  
Piotr Bońkowski, Zbigniew Zembaty

**13h00 – 14h00** | **LUNCH BREAK**

**SESSION 2** Chairs: **Oren Lavan** (Israel) | **Madalena Ponte** (Portugal)

**14h00** | Evaluation of the effectiveness of accidental eccentricity in capturing the effects of irregular masonry infills  
Konstantinos Kostinakis, Asimina Athanatopoulou

**14h15** | Evaluation of torsional parameters in seismic code provisions for multi-story unsymmetric- plan buildings  
Luis Ardila, Juan Reyes, Maria Moreno

**14h30** | Multiobjective optimization of long irregular RC bridges' piers subjected to strong motions and definition of classification tree surrogate models  
Vitor Camacho, Nuno Horta, Mário Lopes

**14h45** | The slenderness of building in plan as a structural regularity criterion  
Grigorios Manoukas, Asimina Athanatopoulou

**15h00 – 15h15** | **AFTERNOON BREAK**

**SESSION 3** Chairs: **Edoardo Marino** (Italy) | **Rita Couto** (Portugal)

**15h15** | The effect of the number of adjacent buildings on the seismic response of structures  
Behroozeh Sharifi, Gholamreza Nouri


**15h30** | Design of irregular frames with fluid viscous dampers using optimization  
Ohad Idels, Oren Lavan

**15h45** | Reducing eccentricity in plan-irregular buildings through an innovative stiffening solution of the façade frames  
Gabriel Moyano, Jesus Miguel Bairán

**16h00 – 16h15** | **AFTERNOON BREAK**

**SESSION 4** Chairs: **Gustavo Ayala** (Mexico) | **Jelena Milosevic Ilic** (Portugal)

**16h15** | Seismic response of irregular bridges with rocking piers  
Ioannis Thomaidis, Andreas Kappos



16h30 | Retrofitting of irregular structures for seismic loads using rocking walls  
Ameer Marzok, Oren Lavan

16h45 | Seismic retrofitting of irregular mixed masonry-RC buildings in Lisbon  
João Rodrigues, Jelena Milosevic Ilic, Rita Bento

17h00 | Seismic behavior of torsionally-weak buildings with and without base isolators  
Juan Reyes

17h15 | Use of fluid dampers in order to improve the seismic performance of reinforced concrete buildings with asymmetric plan-view  
Angelos Krystallis, Asimina Athanatopoulou, Konstantinos Kostinakis

## DAY 2 16<sup>th</sup> DEC

10h00 | **KEYNOTE** Chair: Rita Bento

Seismic response of masonry building aggregates in historic centres: observations, analyses and tests

Professor Andrea Penna, University of Pavia

**SESSION 1** Chairs: Zbigniew Zembaty (Poland) | Rita Couto (Portugal)

10h45 | Evaluating the effect of the directivity of bidirectional ground motion on an irregular building: The former Uto City Hall  
Kenji Fujii

11h00 | Performance of RC beam column joint with varying hoop reinforcement  
Ashish Ugale, Suraj Khante


11h15 | Dynamic identification and structural behavior of an irregular school building  
Riccardo Azzara, Vieri Cardinali, Mario De Stefano, Marco Tanganelli, Stefania Viti

11h30 | Influence of plan irregularity in the seismic vulnerability assessment of existing URM buildings with RC slabs  
Vieri Cardinali, Marco Tanganelli, Mario De Stefano, Rita Bento

11h45 – 12h00 | **MORNING BREAK**

**SESSION 2** Chairs: Asimina Athanatopoulou (Greece) | Ana Simões (Portugal)

12h00 | Multidirectional lateral loads and combination rules in pushover analysis  
Cristina Cantagallo, Francesco Pellegrini, Enrico Spacone, Guido Camata



**12h15** | Effects of column base flexibility on seismic response of instrumented steel moment-frame buildings

**Tomasz Falborski, Ahmand Hassan, Amit Kanvinde**

**12h30** | Seismic risk assessment of existing RC frame-shear wall buildings

**Beatrice Belletti, Enzo Martinelli, Elena Michelini, Michela Tavano, Francesca Vecchi**

**12h45 – 14h00 | LUNCH BREAK**

**SESSION 3** Chairs: **Dietlinde Köber** (Romania) | **Claudia Caruso** (Italy)

**14h00** | Methodology for the seismic assessment of complex masonry monuments: case study of the National Palace of Sintra

**Madalena Ponte, Rita Bento**

**14h15** | Influence of vertical irregularities on the seismic assessment of RC framed and wall-frame buildings

**Maria-Victoria Requena-Garcia-Cruz, Rita Couto, Rita Bento, Antonio Morales-Esteban**

**14h30** | Classification of primary school buildings: influence of in-plan irregularities

**Beatriz Zapico-Blanco, Maria-Victoria Requena-Garcia-Cruz, Emilio Romero-Sánchez, Jaime de-Miguel-Rodríguez, Antonio Morales-Esteban**

**14h45** | Modified modal response spectrum analysis of plan irregular highly torsionally-stiff structures under seismic demand

**Saúl López, Daniel Pancardo, Mario De Stefano, A Gustavo Ayala, Valerio Alecci**

**15h00** | Ground motion duration assessment of a plan-asymmetric reinforced concrete building

**André Belejo, André Barbosa, Rita Bento**

**15h15 – 15h30 | AFTERNOON BREAK**

**15h30 – 16h30 | FINAL DISCUSSION, CLOSING SESSION**