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EARTHQUAKE ENGINEERING
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STUDENT CHAPTER
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SEISMIC DAMAGE ASSESSMENT AND REPAIR COST ESTIMATION FOR RC BUILDINGS VIA THE PEER FRAMEWORK

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Abstract

A methodology is presented for automated damage assessment, cost estimating and 3D visualization for post-earthquake building rehabilitation. The methodology relies on the integration of tools currently-available to the architectural and engineering industry with the framework developed by the Pacific Earthquake Engineering Research Center (PEER) for post-earthquake damage assessment, to automate the generation of damage-assessment visualizations, cost estimation per element, story or building for a given earthquake scenario. Thus, engineers and constructors can develop a comprehensive view of the structural performance of a building that can be easily communicated to non-engineer clients.

BIOGRAPHICAL SKETCH

Dimitrios studied civil engineering at the National Technical University of Athens (Diploma, 1997). He then specialized in geomechanics at Stanford University (MSc 1998) and continued to received a doctorate in civil & environmental engineering (PhD 2002) with a focus on earthquake engineering. On September 2005 he was appointed at the University of Cyprus teaching design of steel structures and earthquake engineering. Since January 2011 he has joined the faculty of the Metal Structures Laboratory at the National Technical University of Athens specializing in the static and dynamic analysis of steel structures. His research interests are focused on integrating structural modeling, computational techniques, probabilistic concepts and experimental results into a coherent framework for the performance evaluation of structures under seismic loading.

DATE: Friday, **MARCH 11, 2011**

TIME: 14:30

LOCATION: AULA 11B, (First floor in front of DISTR), Politecnico di Torino
Faculty, graduate students, and all others are invited to attend.

Gian Paolo Cimellaro

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