



Ministero dell'Istruzione
dell'Università e della Ricerca

Università degli
Studi di Catania

DOTTORATO DI RICERCA IN INGEGNERIA DELLE STRUTTURE

PRIN 2007 PROJECT

SEISMIC RETROFITTING OF BUILDINGS USING ISOLATION AND/OR ENERGY DISSIPATION TECHNIQUES: DESIGN, MODELLING, IDENTIFICATION

JUNE 26 MORNING

9.00 Welcome Addresses

Prof. Luigi Fortuna
Dean, Faculty of Engineering, University of Catania

Prof. Michele Maugeri
Director, Department of Civil and Environmental Engineering, University of Catania

Ing. Carmelo M. Grasso
President, Association of Practicing Engineers, Province of Catania

9.30 Opening of Scientific Sessions

Session 1
Chairman **Prof. G. Oliveto, University of Catania**

9.40 Alfonso Vulcano, University of Calabria
Effects of near-fault earthquakes on the non linear dynamic response of base-isolated r.c. framed structures.

10.00 Massimiliano De Iuliis, University of Salerno
Seismic control of base isolated structures: potential of semi-active and hybrid strategies.

Session 2
Chairman **Prof. Akira Wada, Tokyo Institute of Technology, Yokohama, Japan**

10.20 Gabriela Ferraro and Giuseppe Oliveto, University of Catania
On the stability of elastomeric bearings and isolation systems.

10.40 Antonio D. Lanzo, University of Basilicata
On beam models for buckling (and post-buckling) analysis of multilayered rubber bearings.

11.00 Nicholas D. Oliveto¹ and Gabriela Ferraro²:

¹ State University of New York, University at Buffalo, ²University of Catania

Preliminary results from 3D large displacement FE modelling for the simulation of buckling and post-buckling behaviour of elastomeric bearings.

11.20 Coffee Break

Session 3

Chairman Prof. Alfonso Vulcano, University of Calabria

12.00 Bruno Palazzo, University of Salerno

Learning from the L'Aquila Earthquake.

13.00 Lunch

JUNE 26 AFTERNOON

Session 4

Chairman Prof. Bruno Palazzo, University of Salerno

**15.00 Giuseppe Oliveto¹, Mario Granata³, Giuseppe Buda³, Piero Sciacca¹, Giovanni Scalia³,
Nicholas D. Oliveto²**

¹University of Catania, ²SUNY at Buffalo, ³Practicing Structural Engineer in Catania

The Solarino buildings: a test-bed for seismic retrofitting, base isolation, dynamical testing and system identification.

16.00 Akira Wada:

Integrity, Strength and Deformability in Seismic Design of Multi-Story Structures.

17.00 CONCLUSIONS

A synthesis of the main results of the meeting will be provided by **Akira Wada, Alfonso Vulcano** and **Giuseppe Oliveto**.

17.30 CLOSURE

VENUE

AULA MAGNA ENRICO OLIVERI

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