• ROSE FACULTY

Aiming at a unique diversity of teaching and research training in the field of Earthquake Engineering, the organisation of the ROSE School is based on a relatively short permanence of scholars with extremely high qualification. Indeed, all lecturers at the School are internationally recognised experts in the field, coming from a number of distinguished institutions.

Director
G.M. Calvi

Emeritus Director
M.J.N. Priestley

Teaching Body

N. Abrahamson
D.P. Abrams
S. Akkar
R.J. Archuleta
D.L. Anderson
F. Auricchio
G. Benzoni
J. Berrill
J.J. Bommer
D.M. Boore
F. Brezzi
A. Carr
G. Cassiani
M. Cocco
M.P. Collins
J. Conte
H. Crowley
A. Dazio
A. Der Kiureghian
R. DesRoches
A. Elghazouli
A. Elnashai
R.E. Englekirk
M. Erdik
E. Faccioli
M.N. Fardis
G.L. Fenves
A. Filiatrault
P. Gamba
L. Gambarotta
M.C. Griffith
P. Gülkan
T.J.R. Hughes
E. Kausel
H. Igel
K. Kawashima
M.J. Kowalsky
S. Kramer
C.G. Lai
R. Leon
G. Magenes
G. Mancini
G. Martin
E. Miranda
G. Monti
M. Nakashima
S. Nielsen
T.D. O'Rourke
S. Otani
S. Pampanin
V. Pane
R. Paolucci
A.S. Papageorgiou
A. Pavese
A. Pecker
M. Pender
R. Pinho
P.E. Pinto
C. Prato
J.H. Prevost
G. Rassati
E. Rathje
J. Restrepo
G. Rix
F. Sabetta
J. Salençon
C. Scholz
F. Seible
D. Slejko
G. Solari
E. Spacone
J. Stanton
J.P. Stewart
H. Sucuoglu
T. Sullivan
S. Tinti
T. Triantafillou
G. Valensise
D. Veneziano
K. Wilmanski

The IUSS-Pavia is the last step of a long lasting higher education process that started in 825 when King Lotharius appointed Pavia, the ancient capital of the Lombard kingdom, as the site for higher education of his kingdom. This process went through the foundation in 1361 by Emperor Charles IV of the Studium Generale later on named University of Pavia. Through the centuries the University of Pavia has become one of the leading institutions in Europe.

The IUSS fulfils, since 1997, an advanced teaching and research model successfully implemented by other prestigious institutions in Italy, such as the Scuola Normale Superiore and the Scuola Sant'Anna in Pisa. Owing to the completeness of its education and training fields, which allows a strong interdisciplinary approach, the mission of IUSS is that of contributing to the growth of a small number of selected students by offering them, at any step of their higher education, qualified programmes enhancing their capabilities and knowledge. The Institute is also committed to scientific progress by preparing young researchers and developing scientific research programmes.

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Education and Culture
Erasmus Mundus

The European Commission has approved and financed an Erasmus Mundus Masters on Earthquake Engineering and Engineering Seismology (MEEES), coordinated by the ROSE School and featuring also the participation of the University of Grenoble Joseph Fourier (France), the University of Patras (Greece) and the Imperial College of London (UK), as project partners, as well as of Joint Research Centre (Ispra, Italy) and the Italian Institute for Geophysics and Vulcanology (Italy) as satellite participants. Within the framework of this prestigious Erasmus Mundus programme, which aims to enhance quality in European higher education and to promote intercultural understanding through co-operation with third countries, a relatively large number of scholarships are available for both non-European as well as European students. Interested applicants are invited to visit the MEEES website (www.meees.org) for detailed information and instructions on financial conditions and application procedures.

Grafica Eucentre - Pavia Italy

IUSS Sapere Aude
Istituto Universitario di Studi Superiori Pavia

Collegio Cardinale Riboldi

Università degli Studi di Pavia

THE EIGHTH INTERNATIONAL ROSE SCHOOL SEMINAR

COLLEGIO CARDINALE RIBOLDI
Pavia, Italy
22-23 May 2008

ROSE
SCHOOL

CENTRE FOR POST-GRADUATE TRAINING AND RESEARCH IN EARTHQUAKE ENGINEERING & ENGINEERING SEISMOLOGY

• THE ROSE SCHOOL

The Centre for Postgraduate Training and Research in Earthquake Engineering and Engineering Seismology (ROSE School) is part of the Institute for Advanced Study of Pavia (IUSS: Istituto Universitario di Studi Superiori), a higher education institution in Italy that offers international advanced postgraduate programmes (Masters and Doctorate). Innovative, internationally planned, open minded, grown on the traditionally fertile soil of the University of Pavia, and based on a system of Colleges unique in Italy, the IUSS prepares brilliant individuals to take on the most challenging and demanding public and private posts in contemporary Italy, Europe, the Mediterranean area and the rest of the world.

The ROSE School provides therefore higher-level education in the field of earthquake engineering, offering a number of courses covering applied mechanics, structural engineering, earthquake engineering, engineering seismology and soil dynamics, with emphasis on both theoretical background and design considerations. The MSc and PhD degrees are jointly awarded by the IUSS and the University of Pavia.

Each course is intensively taught in a period of three to five weeks, during which the respective lecturer is able to fully dedicate his/her time and efforts exclusively to the scholastic activities at the school, thus ensuring teaching and research training at the highest possible levels of quality. All of the above endows a truly unique character to the ROSE School, be it for its fully international nature or for its innovative organisation in education and research training in the field of Earthquake Engineering.

• INTERNATIONAL ROSE SCHOOL SEMINARS

As a part of the ROSE programme, an International seminar is organised every year, to provide the School students with an opportunity to present and discuss their research work to an audience of international experts.

In addition to standard presentations on research work carried out at the School, the annual Seminars feature also the tradition of inviting a prominent scientist to deliver a keynote lecture on a given contemporary and highly relevant topic in the field of Earthquake Engineering. At this year's event, such keynote address will be delivered by Professor Domenico Giardini, with the title "Development of a Global Earthquake Model".

It is also foreseen that contributions to the seminar will be published, after a standard review process, in a special issue of the Journal of Earthquake Engineering, which will be distributed to all participants and journal subscribers in mid 2009. Copies of the JEE Special Issues containing the proceedings of previous editions of this annual Seminar are available from the ROSE School Secretariat, on request.

• ATTENDING THE EVENT

In addition to ROSE faculty and students, a maximum of 50 external participants may also be accepted, for which reason professionals and researchers worldwide are encouraged to take part in the event. A 160 € fee is required from external attendees, to cover for the cost of coffee/lunch breaks, seminar dinner and proceedings. Special financial conditions are, however, in place for University researchers or students, to whom a fee of not more than 120 € is usually requested. Those who wish to attend the Seminar are kindly invited to compile and submit the registration form to the ROSE School Secretariat, at the address given overleaf. If you need assistance of any kind (registration form, accommodation, travelling directions, etc.), please do not hesitate in contacting our Administrative Officer, Mr. Saverio Bisoni (secretariat@roseschool.it). You may also refer to the ROSE website for further information on all ROSE School activities.

• VENUE

The ROSE School is located at the European Centre for Training and Research in Earthquake Engineering (EUCENTRE, www.eucentre.it), in Pavia, a historical town in the North of Italy (35 km from Milan), full of University tradition and fame.
The Seminar itself will take place at the Collegio Riboldi, more specifically in its Auditorium, a refurbished church originally designed by Richini and constructed between 1628 and 1632. It is located in Via Luigi Porta, 4.

• PRE-SEMINAR ACTIVITIES

■ *Wednesday 21st, 14h00-17h00, Willis Research Network Seminar*

Seminar and meeting of the Seismic Group of the Willis Research Network (WRN) an international research programme co-ordinated by Willis Re (www.willisresearchnetwork.com). The WRN assists insurers and governments evaluate catastrophe risk exposures and produce solutions to share costs of extreme events across populations via reinsurance, catastrophe bonds and other financial mechanisms. The seminar will explain existing approaches to seismic catastrophe modelling and explore new approaches under development by the ROSE School and other WRN Members. The Seminar takes place at the EUCENTRE, those interested in attending please inform the ROSE School Secretariat.

■ *Thursday 22nd, 10h00 CAR College Inauguration*

Inauguration of the CAR College, an international College for Civil Protection named after Cardinale Agostino Riboldi, purposely-refurbished to serve as an international hosting facility for postgraduate students and visiting scholars working in the field of natural risk mitigation. This historical building is a landmark structure in the centre of Pavia that dates back to the second half of the seventeenth century; all the charm and charisma of the original edifice have been maintained in its transformation to a modern and fully equipped residential facility.

• PROGRAMME OF THE SEMINAR

Thursday, 22nd May

13.00-14.30	Welcome lunch and registration
14.30-16.00	**Session 1 - Chairman: J.J. Bommer**
	Earthquake-induced transient ground strains and rotations from dense seismic networks C. Smerzini[1], R. Paolucci
	Seismic hazard assessment at the archaeological site of Kanchipuram, Southern India T. Ornthammarath[1], C.G. Lai, M. Corigliano, A. Menon, G.R. Dodagoudar
	Modelling a "repetition" of the Messina 1908 earthquake M.S. Teramo[2], H. Crowley, M. Lopez, R. Pinho, G. Cultrera, A. Cirella, M. Cocco, M. Mai, A. Teramo
	Loss assessment for an earthquake scenario in Istanbul I. Bal[1], H. Crowley, R. Pinho
16.30-17.00	*Coffee break*
17.00-18.30	**Session 2 - Chairman: G. Magenes**
	Some issues in the seismic analyses and design of wharves R. Pasquali[3], C.G. Lai
	Feasibility assessment of innovative isolation bearing systems with Shape Memory Alloys G. Attanasi[1], F. Auricchio, G. Fenves
	Influence of clamping stresses on the shear strength of concrete slabs under uniform loads A. Acevedo[1], M. Collins
19.30-23:30	*ROSE Seminar Dinner*

Friday, 23rd May

9.00-10.30	**Session 3 - Chairman: A. Pavese**
	Review of experimental data on design parameters of concentric braced frames K. Wijesundara[1], D. Bolognini, R. Nascimbene, G.M. Calvi
	Blind-prediction of the response of a full-scale 3D steel frame tested under dynamic conditions A. Pavan[3], R. Pinho
	Verification of Nonlinear Static Procedures for assessment of buildings and bridges R. Monteiro[2], M. Marques, C. Casarotti, R. Pinho, R. Delgado
10.30-11.00	Coffee Break
11.00-12.30	**Session 4 - Chairman: M.J.N. Priestley**
	Mitigation of higher mode effects in self-centring walls by using multiple rocking sections L. Wiebe[3], C. Christopoulos
	Displacement-based design of precast walls with additional dampers D. Pennucci[1], G.M. Calvi
	Design verification of a force- and displacement-based designed torsionally-unbalanced wall building S. Martini[3], R. Pinho, G.M. Calvi
12.30-14.00	*Lunch break*
14.00-15.00	Keynote lecture - D. Giardini Development of a Global Earthquake Model
15.00-15.30	Journal Launch - G.M. Calvi Progettazione Sismica
15.30-17.00	Graduation ceremony Programme of future activities & Closing speeches

[1] PhD Student, [2] Visiting PhD Student, [3] MSc Student