PAOLA CERESA

CURRICULUM VITAE ET STUDIORUM

CONTACTS

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EDUCATION

1996 — *High School Diploma (Diploma di Maturità Scientifica),*
Liceo Scientifico Statale G. Perlasca, Idro (BS), Italy.
- 5-year diploma with the maximum grade 60/60 (1st of the class).

1996-2002 — *Alumna of Collegio Ghislieri,*
Collegio Ghisleri (www.ghislieri.it/new/), Pavia, Italy.
- Winner of the position after a national competition on a merit basis (for 20 available positions).

1997-2000 — *Alumna of the advanced pre-graduate school,*
SUS Scuola Universitaria Superiore di Pavia (currently IUSS Istituto Universitario di Studi Superiori di Pavia) and the Università degli Studi di Pavia.

2002 — *Bachelor Degree (5-year Laurea) in Civil Engineering – Structures (July 19, 2002),*
Università degli Studi di Pavia, Corso Strada Nuova, 65 – Pavia; Department of Structural Mechanics.
- Thesis: Effetti di variazione dell'azione assiale sulla risposta sismica di ponti isolati (Effects of the axial force variations on the seismic response of isolated bridges).
- Supervisors: Prof. Gian Michele Calvi (IUSS – Istituto Universitario di Studi Superiori di Pavia); Prof. Ferdinando Auricchio (Università degli Studi di Pavia).
- Main research topics: Design and assessment of structures and infrastructures, computational mechanics; study of the seismic isolation of bridges with friction pendulum devices and implementation of constitutive models for reproducing their nonlinear behavior.
- Final grade: 110/110 cum laude.

2002 — *Italian Engineering Professional License,*
after the National Examination at the Università degli Studi di Pavia, Pavia, Italy

2002 — *Diploma "Formazione Superiore Pre-Laurea" (Pre-graduate advanced training),*
SUS Scuola Universitaria Superiore di Pavia (currently IUSS Istituto Universitario di Studi Superiori di Pavia) and the Università degli Studi di Pavia.

2004 — *Master in Earthquake Engineering of the ROSE School (Master universitario di secondo livello in Ingegneria Sismica) (June 1, 2004),*
ROSE School (European School for Advanced Studies in Reduction of Seismic Risk) of the IUSS Istituto Universitario di Studi Superiori and l'Università degli Studi di Pavia.
- Thesis: "Design of a dynamic and pseudo-dynamic testing facility – Preliminary studies."
- Supervisors: Dr. Alberto Pavese (Università degli Studi di Pavia), Dr. Rui Pinho (Università degli Studi di Pavia).
- Main research topics: Earthquake engineering, engineering seismology and structural

engineering. Design of the one of the largest and powerful shaking tables of Europe, located at the Laboratory of the Eucentre Foundation. Design of the large-scale pseudo dynamic testing facility (strong floor and strong walls) of the Laboratory of the Eucentre Foundation.

2007 *Ph.D. in Earthquake Engineering (Dottore di ricerca in Ingegneria Sismica) (December 3, 2007),*
Università degli Studi di Pavia, Corso Strada Nuova, 65 – Pavia; Department of Structural Mechanics; ROSE School.
- Dissertation: "Development of a fibre flexure-shear model for seismic analysis of RC framed structures".
- Supervisors: Dr. Rui Pinho (Università degli Studi di Pavia), Dr. Lorenza Petrini (Politecnico di Milano).
- Main research topics: Finite element modelling, implementation of constitutive relationships for materials and for modelling reinforced concrete structures, design and assessment of structures, earthquake engineering. Development of a fibre flexure-shear model for cyclic nonlinear behaviour of reinforced concrete structural elements.

CURRENT APPOINTMENTS

January, 1 2017 - present *Seismic Risk Specialist and Project Manager of risk-related projects,*
RED Risk Engineering + Design, Pavia, Italy.

December 2011 – Dec. 2016 *Assistant Professor of Structural Engineering (Ricercatore a tempo determinato di cui all'art. 24, comma 3, lett. a) Legge 240/2010, 08/B3 Tecnica delle Costruzioni, ICAR/09 Tecnica delle Costruzioni),*
IUSS Istituto Universitario di Studi Superiori di Pavia, Pavia, Italy.

December 2011 – Dec. 2016 *Affiliated researcher of the "Vulnerability and Territorial Management" (formerly "Seismic Risk") research group,*
European Centre for Training and Research in Earthquake Engineering – Eucentre Foundation (Centro Europeo di Formazione e Ricerca in Ingegneria Sismica), Pavia, Italy.

September 2013 – Dec. 2016 *Academic Coordinator of the UME (Understanding and Managing Extremes) Graduate School,*
IUSS Istituto Universitario di Studi Superiori di Pavia, Pavia, Italy.

Jan. 2015 – Dec. 2016 *Coordinator of the IUSS Research Unit of the project SASPARM 2.0 "Support Action for Strengthening PAlestine capabilities for seismic Risk Mitigation",*
IUSS Istituto Universitario di Studi Superiori di Pavia, Pavia, Italy.
- Project funded by DG-ECHO – Humanitarian Aid and Civil Protection (Ref. n. ECHO/SUB/2014/694399).
- Project total cost: 666 644 Euro. IUSS total cost: 229 756 Euro.
- Main activities and responsabilities: preparation and submission of the proposal; coordination of the deliverables of the research unit, collaboration to the preparation of deliverables, preparation of the financial statements.

EXPERIENCE

2008-2009 *Postdoctoral research assistant of Structural Engineering (Assegnista di Ricerca) (March 1, 2008 - February 28, 2009),*
Università degli Studi di Pavia, Structural Mechanics Department, Pavia, Italy.
- Area: (area scientifico-disciplinare) Area 4 "Scienze della Terra, Ingegneria Civile ed Idraulica", SSD: ICAR/09 Tecnica delle Costruzioni.

- Research responsible: Prof. Gian Michele Calvi.

2009-2010 *Postdoctoral research assistant of Structural Engineering (Assegnista di Ricerca) (March 1, 2009 - February 28, 2010),*
Università degli Studi di Pavia, Structural Mechanics Department, Pavia, Italy.
- Area: (area scientifico-disciplinare) Area 4 "Scienze della Terra, Ingegneria Civile ed Idraulica", SSD: ICAR/09 Tecnica delle Costruzioni.
- Research responsible: Prof. Gian Michele Calvi.

2010-2011 *Researcher (Ricercatore a tempo indeterminato) (March 11, 2010 - December 15, 2011)*
European Centre for Training and Research in Earthquake Engineering – Eucentre Foundation (Centro Europeo di Formazione e Ricerca in Ingegneria Sismica), Pavia, Italy.
- Winner of a public national competition (Call reference: Record EUC57/2010U "Selezione di personale per l'assunzione nelle posizioni di ricercatore, tecnologo presso la Fondazione Centro Europeo di Formazione e Ricerca in Ingegneria Sismica (EUCENTRE) di Pavia) on a merit basis.
- Researcher of the "Vulnerability and Territorial Management" (formerly "Seismic Risk") Research Area of Eucentre, being involved in several research and training projects at national and international levels, under the coordination of Dr. Barbara Borzi (formerly Dr. Rui Pinho).

December 2011 – Dec. 2016 *Assistant Professor of Structural Engineering (Ricercatore t. d. art. 24 c.3-a L240/2010, Classe Scienze e Tecnologie, 08/B3 Tecnica delle Costruzioni, ICAR/09 Tecnica delle Costruzioni) (December 16, 2011 - December 15, 2016)*
IUSS – Istituto Universitario di Studi Superiori di Pavia, Pavia, Italy.
- Researcher
- Deputy Coordinator (from December 2011 to September 2013) of the International ROSE (formerly ROSE School) and MEEES Programmes in Earthquake Engineering and Engineering Seismology, UME (Understanding and Managing Extremes) Graduate School.
- Academic Coordinator (since September 2013) of the UME Graduate School (www.umeschool.it).
- Organizing Committee Member of the International Nigel Priestley Seminars (formerly International ROSE Seminars).
- Collaborator during the Joint Placement Agreement between IUSS and the University of Toronto, Canada. Involvement in the establishment of a Joint Doctorate Degree between IUSS and University of Toronto (the first Europe-Canada joint degree ever) in the field of Resilience of Critical Infrastructures.
- Member of examination boards and selection committees of the UME Master and doctoral students.
- Member of the Governing Board of the Erasmus Mundus Master Programme MEEES (www.meees.org) in Earthquake Engineering and Engineering Seismology.
- Lecturer and teaching assistant of undergraduate courses, Master and doctoral courses.
- Member of the Placement Committee (Commissione Placement) of IUSS.
- Member of the Joint Committee (Commissione Paritetica) of IUSS.

2012-2014 *Deputy Coordinator and Research Unit Coordinator of the FP7 Project – SASPARM "Support Action for Strengthening Palestinian-administrated Areas capabilities for Seismic Risk Mitigation" (EC GA n. 295122),*
IUSS – Istituto Universitario di Studi Superiori di Pavia, Pavia, Italy.
- Partners: An-Najah National University, Eucentre Foundation and IUSS
- Total cost of the project: 615 606,4 Euro.
- Total number of deliverables to be delivered: 27.

- Milestones to be delivered: 6.
- Start – end dates: October 1, 2012 – November 30, 2014.
- Main activities and responsabilities: preparation and submission of the proposal, review of the proposal and the budget during the negotiation phase; coordination of the project deliverables and milestones, collaboration to the preparation of deliverables and milestones, preparation of the financial statements.

2012-2015 *Lecturer of "Structural Engineering" (Professore a contratto di Tecnica delle Costruzioni) (until April 30, 2015),*
Università degli Studi di Pavia, Civil Engineering and Architecture Department – DICAr (formerly Structural Mechanics Department).
- Professor on contract (October 1, 2012 – September 30, 2014) at the Master Programme in "Building Engineering and Architecture". Institutions involved: Università degli Studi di Pavia, IUSS Istituto Universitario di Studi Superiori di Pavia and Tongji University of Shanghai (China).
- Class of Chinese and Italian students selected on a merit basis.
- 120 hours of teaching in English per academic year corresponding to 9 ETCS.
- Coordinator and main responsible of the examinations (with written and oral intermediate and final exams) during each academic year (until April 30, 2015).
- Focus on structural engineering, computational mechanism, materials for construction.

2013 *Visiting Scholar (June 29 - August 14),*
University of Toronto, Department of Civil Engineering, 35 St. George Street, Toronto, Ontario M5S 1A4 Canada.
- Collaborative research for the project "Earthquake risk reduction in reinforced concrete structures - novel tools for a reliable prediction" with Prof. M.C. Collins and Prof. E. Bentz for the development of a constitutive model for fragile reinforced concrete structures.
- Focus on shear failure of reinforced concrete structures, experimental tests, numerical simulations, implementation of novel constitutive models.
- Direct involvement in the experimental campaign carried out by Dr. David Ruggiero for testing several RC panels under shear loading.

Jan. 2015 - Dec. 2016 *Coordinator of the IUSS Research Uniti of the DG-ECHO Project – SASPARM 2.0 "Support Action for Strengthening PAlestine capabilities for seismic Risk Mitigation" (Ref. n. ECHO/SUB/2014/694399),*
IUSS – Istituto Universitario di Studi Superiori di Pavia, Pavia, Italy.
- Partners: An-Najah National University – Nablus (Palestine), Eucentre Foundation (Coordinator) and IUSS.
- Start – end dates: January 1, 2015 – December 31, 2016.
- Total number of deliverables to be delivered: 41.
- Main tasks of the project: 8 and IUSS is Leader of 3 main tasks (Task C - Prevention
- and mitigation of seismic vulnerability. Task D - Training for targeted groups. Task E - Development of guidelines for risk management policy considering the socio-economic impact).

2016 *Member of the DG-ECHO Project – ITERATE "Improved Tools for Disaster Risk Mitigation in Algeria" (approved for funding),*
IUSS – Istituto Universitario di Studi Superiori di Pavia, Pavia, Italy.
- Partners: IUSS (Coordinator), University of Porto (Portugal), CRAAG (Algeria).
- Start – end dates: January 1, 2017 – December 31, 2019.
- Main activities and responsabilities: preparation and submission of the proposal, review of the proposal and the budget during the negotiation phase.

HONOURS AND AWARDS

- Alumna of Collegio Ghislieri in Pavia (1996 – 2002) after a national competition on a merit basis for 20 available positions.
- Recipient of a scholarship (A.Y. 1997 – 1998) from SUS – Scuola Universitaria Superiore (currently IUSS – Istituto Universitario di Studi Superiori di Pavia) on a merit basis for the best students.
- Graduated Magna cum Laude at the Università degli Studi di Pavia, Pavia, Italy (2002).
- Recipient of a scholarship (A.Y. 2004 – 2007) funded by Italian Ministry of Education and Research (MIUR) for the doctoral programme in "Ingegneria Sismica" (Earthquake Engineering) at the Università degli Studi di Pavia.
- Recipient of a scholarship (A.Y. 2002 – 2003) from IUSS – Istituto Universitario di Studi Superiori di Pavia for attending the Master programme in Earthquake Engineering and Engineering Seismology of the ROSE School.
- Recipient of the scholarship "Igino Adami" (A.Y. 2002 – 2003) from Collegio Ghislieri on a merit basis for best engineering students.
- Winner (2nd rank in the overall rankings) of the FRAMA – 2015 International Benchmark / Blind Prediction Contest (FRAmed-MAsonry composites for Modeling and Standardisation), organised by the Faculty of Civil Engineering Osijek, Josip Juraj Strossmayer University of Osijek, Croatia. Object of the blind prediction is the numerical simulation of the seismic response of a spatial reinforced concrete structure with build masonry infill walls, tested under dynamic loads. The structure was modelled in the program IDEEA developed by Alexander Kagermanov (post-doctoral reaserch assistant at IUSS) and Paola Ceresa.

MEMBERSHIPS

- European Association of Earthquake Engineering (EAEE) (2010-2012).
- Earthquake Engineering Research Institute (EERI).
- Ordine degli Ingegneria della Provincia di Pavia (Italy) (Professional Engineers Society of Pavia).

REGISTRATION

Registered Professional Engineer (since 2004), Reg. No. 3280, Province of Pavia, Italy (first registration Province of Brescia, Reg. No. 4078)

PROFESSIONAL EXPERIENCE

2002-2003 *Temporary employment contract (Contratto di prestazione d'opera occasionale) for 12 months,*
Università degli Studi di Pavia, Structural Mechanics Department.

- Reference project funded by I.N.G.V. (Istituto Nazionale di Geofisica e Vulcanologia) for the diagnostics and preservation of architectural structures with particular reference to the effects of earthquakes and other natural extreme events ("Diagnostica e salvaguardia di manufatti architettonici con particolare riferimento agli effetti derivanti da eventi sismici ed altre calamità naturali", D.M. del 10/05/2000 "Progetti Strategici" Legge 449/97).
- Objective of the contract: Assessment of the seismic vulnerability of a selected bridge ("Valutazione della vulnerabilità sismica del ponte campione scelto").

2003-2004 *Participation to the design of the most powerful shaking table in Europe and of the strong floor and strong walls of the TREES Lab,*
Eucentre Foundation (Fondazione Centro Europeo di Formazione e Ricerca in Ingegneria

Sismica), Pavia, Italy.

2004 *Participation to the post-earthquake field activities for the assessment of public and private buildings, supporting the Italian Civil Protection Department, after the Salò earthquake of November 24, 2004,*
Salò, Brescia, Italy.

2007 *Temporary employment contract (Contratto a progetto) (September 10 - December 31),*
Eucentre Foundation (Fondazione Centro Europeo di Formazione e Ricerca in Ingegneria Sismica), Pavia, Italy.
- Reference project: Research Project n. 6 – Numerical and experimental evaluation of the seismic response of precast structures and structural subassemblies. (Programma di ricerca 6 – Valutazione numerico sperimentale della risposta sismica di strutture prefabbricate in c.a. e sottosistemi strutturali). Executive Project 2005-2008 funded by Italian Department of Civil Protection.

2008 *Temporary employment contract (Contratto a progetto) (January 20 - February 19),*
Eucentre Foundation (Fondazione Centro Europeo di Formazione e Ricerca in Ingegneria Sismica), Pavia, Italy.
- Reference project: Research Project n. 6 – Numerical and experimental evaluation of the seismic response of precast structures and structural subassemblies. (Programma di ricerca 6 – Valutazione numerico sperimentale della risposta sismica di strutture prefabbricate in c.a. e sottosistemi strutturali). Executive Project 2005-2008 funded by Italian Department of Civil Protection.
- Main task: Verification and further developments of a finite element fibre beam element for modelling the shear-flexure response of framed structures under seismic loads ("Verifica ed ulteriori sviluppi di un elemento finito di trave a fibre per la modellazione della risposta taglio-flessione di telai soggetti a carico sismico").

2008 *Temporary employment contract (Contratto di prestazione d'opera occasionale) (September 10 – December 31),*
Eucentre Foundation (Fondazione Centro Europeo di Formazione e Ricerca in Ingegneria Sismica), Pavia, Italy.
- Main tasks related to the project between Calabria Region and Eucentre Foundation for the development of information (IT) procedures for the management of structural designs in a high seismic area, and supporting action for the improvement of regional laws for the seismic design of structures ("Stesura e Riordino delle Normative Regionali in Materia di Legislazione Sismica – Definizione di Procedure Informatiche e Stesura di Documenti Normativi per il Riordino degli Enti Regionali Operanti nel Settore Edilizio e di Gestione del Territorio).

2012 *Post-earthquake damage assessment activity for several reinforced concrete (RC) bridges located in Emilia Romagna and Lombardia Regions, after the Emilia earthquakes of May 20 and May 29, 2012,*
Eucentre Foundation (Fondazione Centro Europeo di Formazione e Ricerca in Ingegneria Sismica), Pavia, Italy.
- Main tasks: field inspections, modelling and analysis of the RC bridges.

2012 *Participation to the post-earthquake field activities for the assessment of public and private buildings, supporting the Italian Civil Protection Department, after the Emilia earthquakes of May 20 and May 29, 2012.*

OPERATIVE PROJECTS

2002-2003 *Assessment of the Bolu Viaduct n. 1 in Bolu (Turkey),*

within the project coordinated by Prof. Gian Michele Calvi and Prof. Nigel Priestley.

- Finite element modelling of the viaduct, with and without the designed Friction Pendulum Systems (FPS). The latter where modelled with the constitutive model developed and implemented (in software FEAP-PV of Prof. Taylor) during the research work for the Thesis of the Bachelor Degree.
- Performing the nonlinear time-history analyses and post-processing of the results, evaluating the effects of the axial force variation on the seismic response of the bridge.
- Assessment of the overall viaduct, comparing the seismic response of the bridge structural components with and without the designed seismic isolation system.

2002-2004 *Design of the shaking table, strong floor and strong walls,*
Eucentre Foundation, Pavia, Italy.

- Study and design of the new shaking table and pseudo-dynamic facilities of the Laboratory of Eucentre performing finite element analyses to arrive to an optimal design solution in terms of costs and performances, focusing on the servo-hydraulic actuator performances for both dynamic and pseudo-dynamic testing.
- Study of the soil-structure interaction in terms of settlements due to the static loads for both the shaking table and the PsD apparatus. The dynamic resultant motion transmitted to the soil from the shaking table is taken into account. The seismic isolation of the shaking table, and consequently of the overall structure, is studied.

2005 *FIRB Internazionalizzazione 2005 (Italy-Turkey),*
Università degli Studi di Pavia, Pavia, Italy.

- Member of the research group.
- Assessment and mitigation of seismic risk of large infrastructures, funded by the Italian Ministry of Research and Education (MIUR).
- Main task: definition and design of seismic isolators and damping devices for long-span bridges.

2007-2012 *Analytical modelling of a large-scale dynamic testing facility,*
Research collaboration between Eucentre Foundation, IUSS and IMATI (Istituto di Matematica Applicata e Tecnologie Informatiche), Pavia, Italy.

- Supervisors: Prof. Franco Brezzi, Prof. Gian Michele Calvi, Dr. Rui Pinho.
- Development of an analytical model, which aims at reproducing the response of a large-scale dynamic testing facility, that is a system composed of the specimen/shaking table/reaction-mass/airbags/dampers/soil.
- Validation of the derived model considering the shaking table of the Eucentre Foundation.

2009-2012 As Researcher of the "Vulnerability and Territorial Management" (formerly "Seismic Risk") Research Area of Eucentre, coordinated by Dr. Barbara Borzi:

- *Project between Eucentre and Calabria Region*, called "Stesura e Riordino delle Normative Regionali in Materia di Legislazione Sismica. Definizione di Procedure Informatiche e Stesura di Documenti Normativi per il Riordino degli Enti Regionali Operanti nel Settore Edilizio." Main tasks (from 2009 to 2011):
  - Development and verification of the information procedures of the online submission of the structural designs of structures, called "SI-ERC Sistema Informatico per la Valutazione di Pratiche di Edilizia in Zona Sismica". (SI-ERC, Sistema Informatico – Edilizia Regione Calabria).
  - Organisation of and teaching activity for the training courses in the field of earthquake engineering and seismic design (126 hours of lessons) in different locations of the Calabria Region for engineers, architects, officials (from June 2009 to April 2010). The detailed list of the courses is given in the Section "Training and Teaching Activities".

- Organisation of and teaching activities for the training in the field of earthquake engineering and seismic design, and assistant (for a total amount of 76 hours in different offices of the Calabria) to the public officers of the regional technical departments of the Calabria Region in relation to the fulfilment of the Regional Law L.R. n. 35, October 19, 2009 (from November 15, 2010 to January 27, 2011). The detailed list of the courses is given in the Section "Training and Teaching Activities".

• *Project between Eucentre and the Italian Civil Protection Department of the Presidency of the Council of the Ministers,* called "Progetto Operativo d2: Definizione delle Priorità di Intervento per Scuole Italiane". Main tasks (from 2010 to 2011):
- Definition of prioritisation procedures for the structural retrofitting of Italian school buildings.
- Modelling and finite element analysis.

• *Project between Eucentre and the Italian Civil Protection Department of the Presidency of the Council of the Ministers,* called "Progetto Operativo d4: Rischio sismico del sistema viabilistico a scala nazionale". Main tasks (from 2010 to 2012) under the coordination of Prof. Paolo Emilio Pinto, Prof. Gian Michele Calvi:
- Definition of the structure of the database for the collection of the data related to the bridges.
- Development and validation of the automatic application BRI.T.N.E.Y. "BRIdge auTomatic Nltha-based Earthquake fragilitY" for computing the fragility curves of bridges through nonlinear time-history analyses. Validation in terms of: i) Verification of spectrum-compatibility of the artificial accelerograms, automatically generated by BRI.T.N.E.Y. and then used in the time-history analysis. ii) Verification of the automatic finite element models generated in OpenSees by means of independent finite element analysis with a different software, MIDAS Civil. iii) Verification of the computations of the fragility curves.
- Coordinator of the nonlinear time-history analyses and post-processing of more than 550 bridges collected in the developed database for computing their fragility curves.

RESEARCH PROJECTS

2011-2013 *FP7-INFRASTRUCTURES-2010, Project NERA Real-time seismic risk assessment and decision support (EC Grant agreement no. 262330),*
Eucentre Foundation, Pavia, Italy.
• Member of the research group leader of the WP14 JRA4: "Real-time seismic risk assessment and decision support"
• Development of mechanics-based simplified procedures for the assessment of progressive damage of buildings due to several seismic events.
• Evaluation of the modification of the capacity of framed reinforced concrete structures.
• Evaluation of the main parameters leading to a reduced capacity of the RC structures.

2011-Dec. 2016 *EMMC-Project N. 2004-0012: MEEES – Erasmus Mundus Master in Earthquake Engineering and Engineering Seismology (GAs 2013-2072, 2012-2380, 2011-1590),*
IUSS – Istituto Universitario di Studi Superiori di Pavia, Pavia, Italy.
• Member of the Governing Board of the MEEES Consortium.
• Deputy Coordinator (2011-2013) of the Master Programme.
• Academic Coordinator (2013-present) of the Master Programme.

2012-2014 *FP7 Project – SASPARM "Support Action for Strengthening Palestinian-administrated Areas capabilities for Seismic Risk Mitigation" (EC GA n. 295122),*
IUSS – Istituto Universitario di Studi Superiori di Pavia, Pavia, Italy.

- Main objective: Creation of a globally competitive and experienced research infrastructure in the field of seismic risk mitigation and disaster management, under the coordination of the An-Najah National University, Nablus (Palestine).
- Support and training activities for Palestinian practitioners, researchers and students, ensuring the development of an earthquake engineering centre in Palestine prepared to respond to the needs of the local community.

Jan. 2015 - Dec. 2016 — *DG-ECHO Project – SASPARM 2.0 "Support Action for Strengthening PAlestine capabilities for seismic Risk Mitigation" (Ref. n. ECHO/SUB/2014/694399),*
IUSS – Istituto Universitario di Studi Superiori di Pavia, Pavia, Italy.

- Development of a Web-Based Platform (WBP) where different users (students/citizens/practitioners/governmental and non-governmental stakeholders) will be able to input and manage data regarding buildings and obtain information about the related seismic risk. In this way, the project will increase awareness in seismic risk and lead private and public sectors to invest in risk mitigation.

2016-present — *Study of the torsional responses of fiber-reinforced concrete members,*
Research collaboration between IUSS and the Università degli Studi di Brescia, DICATAM - Department of Civil Engineering, Architecture, Land, Environment and Mathematics, Brescia, Italy.

- Member of research group, coordinated by Prof. Giovanni Plizzari.
- Comprehensive literature review for the assessment of existing studies, performed experimental campaigns and developed analytical models.
- Numerical analyses for reproducing the torsional response of the FRC members tested by other authors.
- Design of experimental campaign of FRC members and RC members (to be used as reference).
- Post-processing of the results for the development of a constitutive model for modelling the torsional response
- Development of design equations to be introduced in the new release of the Model Code (expected for 2020).

TRAINING, RESEARCH AND TEACHING ACTIVITIES

2001-2004 — *Tutor of "Matematics 1" (Analisi Matematica 1),*
Università degli Studi di Pavia, Engineering.

2002-2003 — *Tutor of the student Dario Pietra*
during his research for the Civil Engineering Degree Thesis (A.Y. 2002/03), under the supervision of Prof. Gian Michele Calvi and Dr. Rui Pinho.

- Study of the axial force variation on the seismic response of isolated bridges, comparing two different isolators.

2004-2005 — *Teaching assistant of the course "Laboratory of Structural Design B" ("Laboratorio di progettazione strutturale B", 2° anno del Corso di Laurea Specialistica in Ingegneria Civile),*
Università degli Studi di Pavia, Civil Engineering.

- Lecturer: Prof. Guido Magenes.
- Main tasks: tutor, teaching assistant (two hours per week during the semester of the course) supporting the students for the development of their final projects.

2005-2006 — *Teaching assistant of the course "Laboratory of Structural Design B" ("Laboratorio di progettazione strutturale B", 2° anno del Corso di Laurea Specialistica in Ingegneria*

Civile),
Università degli Studi di Pavia, Civil Engineering.
- Lecturer: Prof. Guido Magenes.
- Main tasks: Tutor and teaching assistant (two hours per week during the semester of the course) supporting the students for the development of their final projects.

2005-2006 *Tutor of the student Diego Morosi Abbà*
during his research for the Civil Engineering Degree Thesis (A.Y. 2005/06), under the supervision of Prof. Alberto Pavese.
- Study of a system for the seismic simulation of real-scale structures.

2007-present *Expert in the field of "Structural Engineering" (Cultore della materia per il settore afferente alle aree disciplinari di Tecnica delle Costruzioni)*
Università degli Studi di Pavia
- Appointment by the Engineering Faculty Committee (Consiglio di Facoltà), October 17, 2007.

2008-2009 *Teaching assistant of the course "Theory and design of RC structures" ("Teoria e progetto delle costruzioni in C.A.", 1° anno del Corso di Laurea Specialistica in Ingegneria Civile),*
Università degli Studi di Pavia, Civil Engineering.
- Lecturer: Prof. Ester Cantù.
- Main tasks: Lecturer during a cycle of seminars on selected topics. Teaching assistant supporting the students for the development of their final projects.

2008-2009 *Teaching assistant of the course "Structural Engineering A" ("Tecnica delle Costruzioni A", 3° anno del Corso di Laurea di 1° livello in Ingegneria Civile),*
Università degli Studi di Pavia, Civil Engineering.
- Lecturer: Prof. Ester Cantù.
- Main tasks: Lecturer during a cycle of seminars on design and verification of RC sections under normal loads.

2009-2010 *Lecturer of the training courses held during the Project between Eucentre and the Calabria Region ("Definizione di procedure informatiche e Stesura di Documenti Normativi nel settore edilizio e di gestione del territorio" e "Procedure informatiche relative alla LR n.35 del 19.10.09"),*
Calabria Region
- Organisation of the courses together with the staff of "Seismic Risk" research area of Eucentre and Calabria Region.
- Lecturer of:
  - Training course and continuing education for public regional officials at Catanzaro from June 16 to 19 (24 hours of lessons), from November 24 to 25 (12 hours of lessons), from November 30 to December 1 (12 hours of lessons), 2009.
  - Training course for 80 selected designers belonging to the Professional Societies of Engineers, Architects and Surveyors of Catanzaro, Vibo Valentia and Crotone, from November 18 to 20, 2009 (12 hours of lessons).
  - Training course for 80 selected designers belonging to the Professional Societies of Engineers, Architects and Surveyors of Cosenza, from December 2 to 4, 2009 (12 hours of lessons).
  - Training course for 80 selected designers belonging to the Professional Societies of Engineers, Architects and Surveyors of Reggio Calabria, from December 10 to 12, 2009 (12 hours of lessons).
  - Training course for 80 selected designers belonging to the Professional Societies of Engineers, Architects and Surveyors of Catanzaro, Vibo Valentia and Crotone, from January 19 to 21, 2010 (12 hours of lessons).

- Training course for 80 selected designers belonging to the Professional Societies of Engineers, Architects and Surveyors of Cosenza, from January 27 to 29, 2010 (12 hours of lessons).
- Training course for 80 selected designers belonging to the Professional Societies of Engineers, Architects and Surveyors of Reggio Calabria, from February 3 to 5, 2010 (12 hours of lessons).
- Training course for 500 selected designers belonging to the Professional Societies of Engineers and Architects of Reggio Calabria, April 14, 2010 (6 hours of lessons).

2010 *Teaching assistant of the course "RC structures" ("Strutture in C.A.", 1° anno del Corso di Laurea Magistrale in Ingegneria Civile),*
Università degli Studi di Pavia, Civil Engineering.
- Lecturer: Prof. Ester Cantù.
- Main tasks: Lecturer during seminars on the introduction to the software SAP 2000 and its application for modelling the structures to be designed during the course. Teaching assistant. Theoretical and practical lessons.

2010 *Teaching assistant of the course "Laboratory of Structural Design B" ("Laboratorio di progettazione strutturale B", 2° anno del Corso di Laurea Specialistica in Ingegneria Civile),*
Università degli Studi di Pavia, Civil Engineering.
- Lecturer: Dr. Timothy Sullivan
- Main tasks: Lecturer during seminars on the introduction to the software SAP 2000 and its application for modelling the structures to be designed during the course. Teaching assistant.

November 2010 – January 2011 *Training and support activities,*
Calabria Region, Catanzaro at the "Dipartimento No. 9, Infrastrutture, Lavori pubblici, Settore 2: Programmazione e Coordinamento Opere Pubbliche Amministrazione, Norme Sismiche, Assistenza A.P.Q., Difesa del Suolo".
- Support and training activities for public regional officials in relation to the Regional Law L. R. n. 35, October 19, 2009 (L.R. n. 35 e s.m.i.):
  - from November 15 to 19, 2010 (36 hours);
  - from November 29 to December 2, 2010 (24 hours);
  - from January 26 to 27, 2011 (16 hours).

2011 *Teaching assistant of the courses "RC structures, foundations and retaining structures" and "Structural Engineering",*
Università degli Studi di Pavia, Civil Engineering.
- Lecturers: Prof. Ester Cantù and Prof. Guido Magenes.
- Main tasks: Lecturer during seminars on the introduction to the software SAP 2000 and its application for modelling the structures to be designed during the course. Teaching assistant.

2011 *Teaching assistant of the course "Laboratory of Structural Design B" ("Laboratorio di progettazione strutturale B", 2° anno del Corso di Laurea Specialistica in Ingegneria Civile),*
Università degli Studi di Pavia, Civil Engineering.
- Lecturer: Dr. Timothy Sullivan.
- Main tasks: Teaching assistant supporting the students for the development of their final projects.

2011 *Co-supervisor*
- Master thesis of Lorenzo Marziali (ROSE Master Programme – UME Graduate School, IUSS). Thesis: "Seismic response assessment of RC bridges". Supervisors: Dr. Barbara

Borzi, Dr. Paola Ceresa (May 20, 2011).
- Civil Engineering Degree Thesis of Elia Spada "Applicazioni di elementi finiti degeneri di trave e piastra a profili in acciaio in parete sottile", Università degli Studi di Pavia. Supervisor: Prof. Armando Gobetti (bachelor's degree day: July 14, 2011).
- Civil Engineering Degree Thesis of Matteo Artioli "Utilizzo degli elementi degeneri di beam in meccanica non lineare", Università degli Studi di Pavia. Supervisor: Prof. Armando Gobetti (bachelor's degree day: February 18, 2011).
- Civil Engineering Degree Thesis of Maurizio Miraglia "Applicazioni di elementi degeneri di beam al cap", Università degli Studi di Pavia. Supervisor: Prof. Armando Gobetti (bachelor's degree day: February 18, 2011).

2012 — *Teaching assistant of the course "Fundamentals of Seismic Design" for Master and Doctoral ROSE Programme and MEEES Erasmus Mundus Master Programme,*
IUSS – Istituto Universitario di Studi Superiori di Pavia, Pavia, Italy.
- Lecturer: Dr. Alessandro Dazio.
- From January 9 to February 2012.
- Main tasks: Teaching assistant supporting the students for the coursework.

2012 — *Co-supervisor*
- Master thesis of Paola Miglietta (ROSE Master Programme – UME Graduate School, IUSS). Thesis: "Accounting for progressive damage in SP-BELA method". Supervisors: Dr. Barbara Borzi, Dr. Paola Ceresa (May 18, 2012).
- Paola Miglietta presented the research work during the 12th International ROSE Seminar, Pavia (17-18 Maggio, 2012).

2012 — *Teaching assistant of the courses "RC structures, foundations and retaining structures" and "Structural Engineering",*
Università degli Studi di Pavia, Civil Engineering.
- Lecturers: Prof. Ester Cantù and Prof. Guido Magenes.
- Main tasks: Teaching assistant of students for the coursework and the final projects.

2012-2015 — *Lecturer of "Structural Engineering" (Professore a contratto di Tecnica delle Costruzioni) (until April 30, 2015),*
Università degli Studi di Pavia, Civil Engineering and Architecture Department – DICAr
- Professor on contract (October 1, 2012 – September 30, 2014) at the Master Programme in "Building Engineering and Architecture".
- Partners: Università degli Studi di Pavia, IUSS Istituto Universitario di Studi Superiori di Pavia and Tongji University of Shanghai (China).
- 120 hours of teaching in English per academic year corresponding to 9 ETCS.

February 2013 — *Lecturer of "Fundamentals of seismic vulnerability and seismic risk"*
An-Najah National University, Nablus, Palestine.
- Course for young researchers and students in the framework of the FP7-SASPARM Project (EC GA n. 295122) training activities.

April-May 2013 — *Teaching assistant of the course "Myths and fallacies in engineering structures"*
IUSS Pavia
Lecturer Prof. Gian Michele Calvi

2013 — *Outside examiner of engineering student*
- Alessandro Baselli. Thesis "Experimental study on fiber-reinforced concrete panels subjected to shear", Università degli Studi di Brescia. Supervisor: Dr. Fausto Minelli. Co-supervisors: Prof. Frank J. Vecchio (University of Toronto), Prof. Giovanni Plizzari (bachelor's degree day: September 23, 2013)

March-April 2014 — *Teaching assistant of the course "Myths and fallacies in engineering structures"*
IUSS Pavia

- Lecturer Prof. Gian Michele Calvi

2014 *Outside examiner of engineering students*

- Michele Moser. Thesis "Prove sperimentali a taglio puro su materiali fragile", Università degli Studi di Brescia. Supervisor: Dr. Fausto Minelli. Co-supervisors: Prof. Giovanni Plizzari, Dr. Luca Facconi (bachelor's degree day: March 17, 2014).
- Gian Andrea Poli. Thesis "Teoria dei campi compressi modificata per il calcestruzzo fibrorinforzato: studio sperimentale", Università degli Studi di Brescia. Supervisor: Dr. Fausto Minelli. Co-supervisors: Prof. Giovanni Plizzari, Dr. Luca Facconi (bachelor's degree day: October 27, 2014).

2014 *Supervisor*

- Master thesis of Giorgio Negrisoli (intership at SOFiSTiK, ROSE Master Programme – UME Graduate School, IUSS). Thesis: "Hysteretic Models Considering Axial-Shear-Flexural Interaction" (May 16, 2014).

2015 *Outside examiner of engineering student*

- Corrado Vecchi. Thesis "Teoria dei campi compressi modificata per il calcestruzzo fibrorinforzato: studio sperimentale ed analitico", Università degli Studi di Brescia. Supervisor: Dr. Fausto Minelli. Co-supervisors: Prof. Giovanni Plizzari, Dr. Luca Facconi (bachelor's degree day: March 23, 2015).

April-May 2014 *Teaching assistant of the course "Myths and fallacies in engineering structures"*
IUSS Pavia
Lecturer Prof. Gian Michele Calvi

May 2015 *Supervisor*

- Master thesis of Francesco Visaggio (intership at Bridge Design Service AG – Zurich; ROSE Master Programme – UME Graduate School, IUSS). Thesis: "Seismic assessment of Bebo® concrete arch bridge and existing mixed masonry building considering soil structure interaction" (May 15, 2015).

2015-2016 *Supervisor and coordinator of two research engineers involved in the evaluation of seismic risk mitigation in Palestine, within the framework of the SASPARM 2.0 project,*

- "Seismic risk mitigation of buildings", Research Engineer Ms. Vania Cerchiello (for 1 year, since September 2015).
- "Integrated assessment of seismic vulnerability of RC buildings", Research Engineer Mr. Iason Grigoratos (for 1 year, since January 2016).

2016 *Supervisor*

- Master thesis of Alonso Gonzales (ROSE Master Programme – UME Graduate School, IUSS). Thesis: "Nonlinear Analysis of Shear Critical RC Members using current FE software" (May 20, 2016).

2013-2016 *Supervisor*

- PhD thesis of Alexander Kagermanov (ROSE Doctoral Programme – UME Graduate School, IUSS). Thesis: "A 3D fibre Flexure-Shear Model for Cyclic Nonlinear Behaviour of RC members" (expected December, 2016).

2017 (expected) *Co-Supervisor*

- Master thesis of Ricardo Jaramillo Rivera (ROSE Master Programme – UME Graduate School, IUSS). Thesis: "Torsional responses of fiber-reinforced concrete members". Supervisors: Dr. Paola Ceresa and Prof. Giovanni Plizzari (expected May, 2017).

2017 (expected) *Co-Supervisor*

- PhD thesis of José Alejandro Morales Gomez (ROSE Doctoral Programme – UME Graduate School, IUSS). Thesis: "Ductility and shear demands in asymmetric RC wall buildings". Supervisors: Dr. Paola Ceresa and Dr. Matias Hube of the Pontificia

Universidad Católica de Chile (expected May, 2017).

2018 (expected) *Co-Supervisor*

- PhD thesis of Vania Cerchiello (REM Doctoral Programme – UME Graduate School, IUSS). Thesis: "Remote sensing based tools for improved seismic risk assessment of the built environment". Supervisors: Dr. Paola Ceresa and Dr. Ricardo Monteiro (IUSS) (expected December, 2018).

RESEARCH INTERESTS

As introduced in the previous Sections, the main research topics of interest are:

- Development and implementation of constitutive models in finite element codes.
- Modelling of structures with software.
- Numerical simulations of the response of buildings and bridges.
- Design and retrofit of structures.
- Study of the seismic response of reinforced concrete buildings and bridges.
- Seismic assessment of existing reinforced concrete buildings and bridges.
- Development of analytical model for dynamic systems (such as the shaking table of the Eucentre Foundation).
- Vulnerability and risk analysis of buildings and bridges.
- Development and implementation of constitutive models for seismic isolation devices.

PUBLICATIONS

Refereed journal publications (published):

1. Calvi G. M., Ceresa P., Casarotti C., Bolognini D., Auricchio F. (2004) "Effects of the Axial Force Variation in The Seismic Response of Bridges Isolated with Friction Pendulum Systems," Journal of Earthquake Engineering, Vol. 8, Special Issue 1, pp. 187-224 (01 January 2004. Publisher Taylor & Francis, London W1T 3JH, UK. ISSN: 1363-2469. doi: 10.1080/13632460409350525). Editors: A.S. Elnashai, N.N. Ambraseys.
2. Ceresa P, Petrini L, Pinho R (2007) "Flexure-shear Fibre Beam-Column Elements for Modelling Frame Structures under Seismic Loading – State of the art," Journal of Earthquake Engineering, Vol.11, Supplement 1, pp. 46-88 (Online Publication Date: 01 January 2007. Publisher Taylor & Francis, London W1T 3JH, UK). ISSN: 1363-2469, doi: 10.1080/13632460701282370. Editors: A.S. Elnashai, N.N. Ambraseys.
3. Ceresa P, Petrini L, Pinho R, Sousa R (2009) "A fibre flexure-shear model for seismic analysis of RC-framed structures", Earthquake Engineering and Structural Dynamics, Special Issue on "Nonlinear Modeling, and Simulation for Earthquake Engineering', Vol. 38, No. 5, pp. 565-586 (Published online: February, 13, 2009 in Wiley InterScience (www.interscience.wiley.com). ISSN: 0098-8847. doi: 10.1002/eqe.894. Edited by: A. K. Chopra, P.Fajfar, M. Nakashima.
4. Ceresa P, Brezzi F, Calvi GM, Pinho R (2012) "Analytical modelling of a large-scale dynamic testing facility", Earthquake Engineering and Structural Dynamics (published online: June, 27, 2011), Vol. 41, Issue 2, pp. 255-277. ISSN: 00988847. doi. 10.1002/eqe.1128. John Wiley & Sons, Ltd. Edited by: A. K. Chopra, P.Fajfar, M. Nakashima.
5. Borzi B, Ceresa P, Faravelli M, Fiorini E, Onida M (2013). "Seismic Risk Assessment of Italian School Buildings". Computational Methods in Earthquake Engineering, Vol.2. COMPUTATIONAL METHODS IN APPLIED SCIENCES, vol. 30, p. 317-344, Dordrecht Heidelberg London New York:Springer Science+Businness Media, ISBN: 978-94-007-6572-6, ISSN: 1871-3033, doi:10.1007/978-94-007-6573-3_15 C.
6. Borzi B, Ceresa P, Franchin P, Noto F, Calvi GM and Pinto PE (2015). "Seismic Vulnerability of the Italian Roadway Bridge Stock", Earthquake Spectra, Vol. 31(4), p. 2137-2161, published online December 2014, doi:

http://dx.doi.org/10.1193/070413EQS190M. ISSN: 8755-2930. Editor: Jonathan P. Stewart.

7. Fagà E, Ceresa P, Nascimbene R, Moratti M, Pavese A (2016). "Modelling curved surface sliding bearings with bilinear constitutive law: effects on the response of seismically isolated buildings", Materials and Structures, Vol. 49(6), pp. 2179-2196; first published online June 2015, DOI 10.1617/s11527-015-0642-2. Print ISSN: 1359-5997. Online ISSN: 1871-6873. Publisher: Springer Netherlands.
8. Kagermanov A, Ceresa P (2016). "Physically Based Cyclic Tensile Model for RC Membrane Elements", Journal of Structural Engineering (ASCE), Vol. 142(12) , doi: 10.1061/(ASCE)ST.1943-541X.0001590, 04016118. ISSN (print): 0733-9445. ISSN (online): 1943-541X. Publisher: American Society of Civil Engineers.

Article submitted to refereed journal (under review or in print):

9. Kagermanov A, Ceresa P, Poveda J, Morales E, O'Connor J (2016). "Seismic Performance of RC Buildings during the Mw 7.8 Muisne (Ecuador) Earthquake on April 2016: field observations and case study. Bulletin of Earthquake Engineering (under review).
10. Kagermanov A, Ceresa P (2016). "Fiber-section model with an exact shear strain profile for two-dimensional RC frame structures". ASCE Journal of Structural Engineering (in print).
11. Grigoratos I, Ceresa P, Monteiro R, Borzi B (2016) "Extending the applicability of a simplified seismic assessment method to irregular reinforced concrete buildings", Engineering Structures (under review).
12. Cerchiello V, Ceresa P, Monteiro R (2016) "Assessment of social vulnerability to seismic hazard in Nablus, Palestine", International Journal of Disaster Risk Science (under review).

Refereed national journal publications:

13. Borzi B, Germagnoli F, Faravelli M, Onida M, Pagano M, Polli D, Ceresa P, Calvi GM, Zinno L, Siviglia S, Iiritano G, Mauro L (2012). "Sistema Informatico Edilizia Regione Calabria (SI-ERC)", Progettazione sismica, Vol. 2, pp. 121-131. ISSN: 1973-7432 (Title in English: Information system for building industry in Calabria Region).

Monographs or book chapters:

14. Calvi GM, Pavese A, Ceresa P, Dacarro F, Lai CG, Beltrami CMA (2005). "Design of a Large-Scale Dynamic and Pseudo-Dynamic Testing Facility", IUSS Press, Pavia, Italy, pp. 1-178. ISBN 9788873580263.
15. Borzi B, Ceresa P, Faravelli M, Onida M (2012). "Vulnerability study of steel storage tanks in a large industrial area of Sicily". In: Behaviour of Steel Structures in Seismic Areas, STESSA 2012. Chapter 145, Taylor & Francis Books, Ltd. , CRC Press 2011, Print ISBN: 978-0-415-62105-2, eBook ISBN: 978-0-203-11941-9, DOI: 10.1201/b11396-157, Edited by Mazzolani F and Herrera R, pp. 1025-1031.

Research reports:

16. Ceresa P (2004). "Design of a dynamic and pseudo-dynamic testing facility – Preliminary studies". Master Thesis – ROSE School, IUSS and Università degli Studi di Pavia, Pavia, Italy.
17. Ceresa P (2007). "Analytical modelling of a large dynamic testing facility". Individual Study – ROSE School, Università degli Studi di Pavia, Pavia, Italy.
18. Ceresa P (2007). "Development of a fibre flexure-shear model for seismic analysis of RC framed structures". PhD Thesis – ROSE School, Università degli Studi di Pavia,

Pavia, Italy.
19. Ceresa P, Petrini L, Pinho R (2008). “A Fibre Flexure-Shear Model for Cyclic Nonlinear Behaviour of RC Structural Elements,” Research Report ROSE – 2008/07, IUSS Press, Pavia, Italy, pp. 1-329. ISBN 978-88-6198-028-0.

Papers in international conference proceedings:

20. Pavese A, Lai CG, Calvi GM, Ceresa P, Beltrami CMA (2005). “Reaction Mass and Foundation Design of the Large one-degree-of-freedom EUCENTRE Shaking Table, in Pavia, Italy,” Proceedings of the 1st International Conference on Advances in Experimental Structural Engineering (AESE), 19-21 July 2005, Nagoya, Japan. ISBN 9784901887199.
21. Pavese A, Calvi GM, Dacarro F, Ceresa P (2006). “Shaking Table and Research Activities at EUCENTRE, Pavia”, Proceedings of the 1st European Conference of Earthquake Engineering and Seismology (ECEES), 3-8 September 2006, Geneva, Switzerland (paper No. 1099). ISBN 978-2-8399-0190-1.
22. Ceresa P, Petrini L, Pinho R, Auricchio F (2006). “Flexure-Shear Fibre Beam-Column Element for Modelling of Structures under Seismic Loading,” Proceedings of the 1st European Conference of Earthquake Engineering and Seismology (ECEES), 3-8 September 2006, Geneva, Switzerland (paper No. 1425). ISBN 978-2-8399-0190-1.
23. Ceresa P., Petrini L., Pinho R., Auricchio F. (2008) “Development of a Fibre Flexure-Shear Model for Seismic Analysis of RC Framed Structures,” Minisymposium on Computational Methods for Seismic Analysis and Design, WCMM8 and ECCOMAS 2008, 30 June – 4 July 2008, Venice, Italy. Editors: B.A. Schrefler and U. Perego (reference No. 2068). ISBN 9788496736559.
24. Ceresa P, Petrini L, Pinho R (2008) “Cyclic nonlinear behaviour of RC framed structures accounting for flexure-shear interaction,” Proceedings of the 14th World Conference on Earthquake Engineering (14WCEE), 12-17 October 2008, Beijing, China. BEIJING: International association for Earthquake Engineering (paper No. 14-0165).
25. Borzi B., Ceresa P., Faravelli M., Fiorini E., Onida M. (2011), “Definition of a prioritisation procedure for structural retrofitting of Italian school buildings”, COMPDYN 2011, 3rd International Conference on Computational Methods in Structural Dynamics & Earthquake Engineering, ECCOMAS Thematic Conference, 25-28 May 2011, Corfu, Greece. Editors: Papadrakis M., Fragiadakis M., Plevris V. (paper No. 302). ISBN 978-960-99994-0-3.
26. Borzi B., Ceresa P., Faravelli M., Onida M. (2012) “Vulnerability study of steel storage tanks in a large industrial area of Sicily”. In: Proceedings of the 15th World Conference on Earthquake Engineering (15WCEE). Lisbon, September 24-28, Paper N. 4137, ISBN: 9789892031828.
27. Miglietta P.C., Borzi B., Ceresa P., Iaccino R. (2012) “Accounting for progressive damage in large scale seismic risk assessment of RC buildings”. In: Proceedings of the 15th World Conference on Earthquake Engineering (15WCEE). Lisbon, September 24-28, Paper N. 5173, ISBN: 9789892031828.
28. Ceresa P., Fiorini E., Borzi B. (2012) “Effects of the Seismic Input Variability on the Seismic Risk Assessment of RC Bridges”. In: Proceedings of the 15th World Conference on Earthquake Engineering (15WCEE). Lisbon, September 24-28, Paper N. 5414, ISBN: 9789892031828.
29. Ceresa P., Borzi B., Noto F., Onida M. (2012) “Application of a Probabilistic Mechanics-based Methodology for the Seismic Risk Assessment of the Italian RC Bridges”. In: Proceedings of the 15th World Conference on Earthquake Engineering (15WCEE). Lisbon, September 24-28, Paper N. 5102, ISBN: 9789892031828.

30. Ceresa P, Brezzi F, Calvi GM (2013). “Modelling a large-scale uniaxial shaking table facility”. In: Proceedings of the 4th Thematic Conferences of the European Community on Computational Methods in Applied Sciences (ECCOMAS) and a Special Interest Conference of the International Association for Computational Mechanics (IACM). 1561, Kos Island, Greece, 12–14 June 2013). Editors: Papadrakis M., Papadopoulos V., Plevris V. ISBN: 978-960-99994-2-7.
31. Al Dabbeek J, Ceresa P, Borzi B, Germagnoli F (2013). Seismic Risk Mitigation in Palestine: SASPARM Project. In: United Nations Educational, Scientific and Cultural Organization – UNESCO U.S. Geological Survey – USGS Real Instituto y Observatorio de la Armada in San Fernando – ROA Network of European Research Infrastructures for Earthquake Risk Assessment and Mitigation – NERA. UNESCO , Reducing Earthquake Losses in then Extended Mediterranean Region. UNESCO, Fuengirola (Malaga) Spain, 28-31 October 2013.
32. Kagermanov A, Ceresa P (2016). “An exact shear strain approach for RC frame elements with axial-shear interaction”. In: Proceedings of VII European Congress on Computational Methods in Applied Sciences and Engineering – ECCOMAS 2016, 5-10 June 2016, Crete Island, Greece. Editors M. Papadrakakis; V. Papadopoulos; G. Stefanou; V. Plevris. Book published: September 2016. Publisher: National Technical University of Athens (NTUA), ISBN: 978-618-82844-0-1, Vol. 4, pages: 6810-6822.
33. Monteiro R, Ceresa P, Cerchiello V, Dabeek J, Di Meo A, Borzi B (2016). “Towards integrated seismic risk assessment in Palestine – Application to the city of Nablus”. In: Proceedings of VII European Congress on Computational Methods in Applied Sciences and Engineering – ECCOMAS 2016, 5-10 June 2016, Crete Island, Greece. Editors M. Papadrakakis; V. Papadopoulos; G. Stefanou; V. Plevris. Book published: September 2016. Publisher: National Technical University of Athens (NTUA), ISBN: 978-618-82844-0-1, Vol. 3, pages 5987-5998.
34. Grigoratos I, Dabeeek J, Faravelli M, Di Meo A, Cerchiello V, Borzi B, Monteiro R, Ceresa P (2016). “Development of a fragility and exposure model for Palestine – Application to the city of Nablus”. In: Proceedings of World Multidisciplinary Civil Engineering-Architecture-Urban Planning Symposium 2016, WMCAUS 2016, Procedia Engineering, ScienceDirect, Elsevier, doi: 10.1016/j.proeng.2016.08.797, Vol. 161, pp. 2023-2029.
35. Borzi B, Di Meo A, Faravelli M, Ceresa P, Monteiro R, Dabeek J (2016). Definition of fragility curves for frame buildings in Nablus – Palestine. Proceedings of ICONHIC 2016, 1st International Conference on Natural Hazards & Infrastructures, June 28-30, Chania, Greece.
36. Grigoratos I, Ceresa P, Monteiro R, Borzi B (2016). Extending the applicability of simplified pushover-based vulnerability assessment methods to irregular RC buildings. Proceedings of ICONHIC 2016, 1st International Conference on Natural Hazards & Infrastructures, June 28-30, Chania, Greece.
37. Cerchiello V, Ceresa P, Monteiro R (2016). “Using the scorecard approach to measure seismic social resilience in Nablus, Palestine”, IFIP Advances in Information and Communication Technology, Springer. First IFIP Conference on Information Technology in Disaster Risk Reduction (ITDRR 2016), November 16 - 18, 2016, University of National and World Economy, Sofia, Bulgaria.
38. Morales G. AJ, Ceresa P, Hube MA (2017). “Ductility and shear demands in reinforced concrete buildings with asymmetric walls”: 16th WCEE World Conference on Earthquake (16WCEE), Santiago Chile, January 9th to 13th 2017.
39. Kagermanov A, Ceresa P (2017). “New cyclic tensile model for two-dimensional finite analysis of RC members”: 16th WCEE World Conference on Earthquake

(16WCEE), Santiago Chile, January 9th to 13th 2017.

Papers in national conference proceedings:

40. Ceresa P, Petrini L (2007). "Sviluppo di un elemento finito di trave a fibre per la modellazione della risposta a taglio-flessione di telai soggetti a carico sismico," Convegno nazionale L'ingegneria Sismica in Italia, 12, Pisa 10-14 giugno 2007 (paper No. 157). Editors: Franco Braga and Walter Salvatore, Edizioni PLUS, Pisa University Press. ISBN 978-88-8492-458-2.
41. Borzi B., Ceresa P., Lopez M., Magni F., Bianchi F. (2009) "Metodo semplificato per la definizione della curva di pushover di edifici in CA a telaio". In: Proceedings of XIII Convegno, ANIDIS 2009, L'ingegneria Sismica in Italia, June 28-2 July 2, Bologna (paper No. S2.3). Editors: Franco Braga and Marco Savoia. San Marino:IMREADY, ISBN 9788890429200.
42. Ceresa P, Petrini L, Pinho R (2009). "Modellazione della risposta taglio-flessione di elementi strutturali in CA soggetti a carico ciclico", In: Proceedins of XIII Convegno, ANIDIS 2009, L'ingegneria Sismica in Italia, June 28-2 July 2, 2009, Bologna (paper No. S2.6). Editors: Franco Braga and Marco Savoia. ISBN 9788890429200.
43. Borzi B., Ceresa P., Faravelli M., Fiorini E., Onida M. (2011), "Applicazione del metodo meccanico SP-BELA alla definizione di rischio sismico e scenari di danno del patrimonio edilizio italiano". In: Proceedings of XIV Congresso Nazionale "L'Ingegneria Sismica in Italia" ANIDIS 2011, September 18-22, 2011, Bari, Italia (paper N. 802). ISBN 978-88-7522-040-2.
44. Borzi B., Ceresa P., Faravelli M., Fiorini E., Onida M. (2011), "Nuove mappe di rischio e scenari di danno del territorio nazionale: risultati e confronti con gli studi precedenti". In: Proceedings of XIV Congresso Nazionale "L'Ingegneria Sismica in Italia" ANIDIS 2011, September 18-22, 2011, Bari, Italia (paper N. 803). ISBN 978-88-7522-040-2.
45. Ceresa P, Marziali L, Borzi B (2011). "Progettazione simulata di ponti esistenti in CA per una valutazione della loro vulnerabilità sismica". In: Proceedings of XIV Congresso Nazionale "L'ingegneria Sismica in Italia" ANIDIS 2011, September 18-22, 2011, Bari, Italia (paper N. 936). ISBN 978-88-7522-040-2.
46. Kagermanov A, Ceresa P (2015). "Cyclic Analysis of Reinforced Concrete Members using Membrane Finite Elements". In: Proceedings of XVI Convegno Nazionale "L'Ingegneria Sismica in Italia", L'Aquila, Italy. Editorial board: Franco Braga and Dante Galeota.

Deliverables and technical reports:

47. Author or reviewer of the twenty-seven (27) deliverables of the FP7-SASPARM Project "Support Action for Strengthening Palestinian-administrated Areas capabilities for Seismic Risk Mitigation" (EC GA n. 295122). The list of the deliverables and the delivarables can be downloaded from: www.sasparm.ps/en.
48. Author or reviewer of the 41 deliverables delivered/to be delivered for SASPARM 2.0 "Support Action for Strengthening PAlestine capabilities for seismic Risk Mitigation", (Ref. n. ECHO/SUB/2014/694399) The list of the deliverables and the delivarables can be downloaded from : www.sasparm2.com.

PARTICIPATION TO CONFERENCES

International conferences:

- Poster, 1st European Conference of Earthquake Engineering and Seismology (ECEES), Geneva, Switzerland, 3-8 September, 2006 (paper No. 1425).
- Oral presentation, Minisymposium on Computational Methods for Seismic Analysis and Design, WCMM8 and ECCOMAS 2008, Venice, Italy, 29th June–3rd July 2008 (paper

No. 1425).

- Oral presentation, 14th World Conference on Earthquake Engineering (14 WCEE), Beijing, China, 12-17 October, 2008 (paper No. 14-0165).
- 9th US National and 10th Canadian Conference on Earthquake Engineering: Reaching Beyond Borders, Toronto, Canada, July 25-29, 2010.
- Oral presentation, COMPDYN 2011, 3rd International Conference on Computational Methods in Structural Dynamics & Earthquake Engineering, ECCOMAS Thematic Conference, 25-28 May 2011, Corfu, Greece (paper No. 302).
- Oral presentation, 15th World Conference on Earthquake Engineering (15 WCEE), Lisbon, Portugal, 24-28 September, 2012 (paper No. 5102 and paper No. 5414).
- Oral presentation, ECCOMAS 2013, 4th Thematic Conferences of the European Community on Computational Methods in Applied Sciences (ECCOMAS) and a Special Interest Conference of the International Association for Computational Mechanics (IACM), 12–14 June 2013, Kos Island, Greece (paper No. 1561).

International seminars:

- Oral presentation, The 3rd International ROSE School Seminar, Pavia, 23-24 June, 2003.
- Oral presentation, The 6th International ROSE School Seminar, Pavia, 29-30 May, 2006.
- Chairman, The 13th International ROSE Seminar, Pavia, 16-17 May, 2013.

International workshops:

- Recent Developments on Shear and Punching Shear in RC and FRC Elements", Salò, Lake Garda, Italy, October 15-16, 2010.

National conferences:

- Oral presentation, XIV ANIDIS, L'ingegneria Sismica in Italia, Bari, 18-22 September 2011 (Paper No. 936).
- Oral presentation, XIII ANIDIS, L'ingegneria Sismica in Italia, Bologna, June 29-July 2, 2009 (Paper No. S2.3 e S2.6).
- Oral presentation, XII ANIDIS, L'ingegneria Sismica in Italia, Pisa, June 10-14, 2007 (Paper No. 157).

REFEREE

For international peer-review journals, such as:

- Engineering Structures (since 2009)
- Materials and Structures (since 2012)
- Structural Concrete (since 2012)
- Earthquake Spectra (since 2013)
- Nonlinear Dynamics (since 2013)
- European Journal of Environmental and Civil Engineering (since 2015)
- Applied Science (since 2016)
- Journal of Structural Engineering – ASCE (since 2016)
- Earthquake Engineering and Engineering Vibration (since 2016)
- Earthquakes and Structures (since 2016)
- Structural Concrete (since 2017)

For international conferences, such as:

- 15th World Conference on Earthquake Engineering (reviewer of abstracts and then full papers)
- 16th World Conference on Earthquake Engineering (reviewer of abstracts and then full papers)

TRAINING COURSES

- "Nonlinear Computational Solid and Structural Mechanics - Theoretical Formulation, FEM technology and computations," Coordinators: Prof F. Brezzi, Prof. A. Ibrahimbegovic, Prof. R.L. Taylor, Prof F. Auricchio (May, 2007), IMATI, Pavia, Italy.
- "Mechanics of Reinforced Concrete", Coordinator: Prof. Frank J. Vecchio, University of Toronto, Canada (July 2007), Università degli Studi di Brescia, Brescia, Italy.
- "Essentials for NX5-NX6 Designer", Coordinated by SIEMENS Product Lifecycle Management Software (IT) S.r.l. (October, 2009), SIEMENS, Milano, Italy.
- "Advanced Simulation Processes", Coordinated by SIEMENS Product Lifecycle Management Software (IT) S.r.l. (April, 2010), SIEMENS, Milano, Italy.

MASTER AND DOCTORAL COURSES

ROSE School (one-month courses):

- "Seismic design, seismic isolation and retrofit of bridges," Lecturer Prof. K. Kawashima.
- "Soil dynamics and design of foundations," Lecturer Prof. A. Pecker.
- "Numerical methods in structural analysis," Lecturer Prof. F. Brezzi.
- "Basics of engineering seismology and seismic hazard analysis," Lecturer Prof. E. Faccioli.
- "Assessment and strengthening of RC structures," Lecturer Prof. G.M. Calvi.
- "Seismic design and retrofit of bridges," Lecturer Prof. M.J.N. Priestley.
- "Dynamic analysis of structures," Lecturer Prof. G. Fenves.
- "Seismic design of reinforced concrete buildings," Lecturer Prof. J. Restrepo.
- "Supplemental Damping and Seismic Isolation," Lecturer Prof. A. Filiatrault.
- "Prestressed concrete structures," Lecturer Prof. M. P. Collins.

ROSE School (short courses):

- "Probabilistic Seismic Risk Assessment of Structures," Coordinator Prof. P.E. Pinto.
- "Experimental Methods in Structural Engineering," Coordinator Prof. A. Pavese.
- "Structural Assessment of Heritage Buildings," Coordinator Prof. G. Macchi.
- "Post-earthquake building safety and damage assessment," Coordinator Dr. A. Goretti.

LINGUISTIC

- Italian (mother tongue)
- English (very good)

COMPUTER SKILLS

- Microsoft Office tools
- Programming languages: Matlab, Fortran, Delphi, Visual Basic
- Codes/Software: ABAQUS, NX Nastran, SeismoStruct, SAP 2000, Midas GEN and Midas Civil, FEAP, FEAP-PV, OpenSees, ATENA, DIANA, VecTor, AutoCAD, SQL Server 2008.

PATENT

"SI-ERC, Sistema Informatico-Edilizia Regione Calabria", patent

- Member of the research group working at the development and validation of the SI-ERC.
- Project between Eucentre Foundation and Calabria Region.

MATERNITY LEAVE

- 5 months: January 26, 2015 to June 26, 2015.
- June 06-10, 2016.
- July 04-07, 2016.
- July 12-15, 2016.