## Sergio Lagomarsino

Full Professor of Structural Engineering

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#### **EDUCATION**

1984 Graduated cum laude in Civil Engineering at University of Genoa, Italy 1989 PhD in Structural Engineering at University of Florence, Italy

### **POSITIONS**

1990-1998 Assistant Professor, University of Genoa

1998-2000 Associate Professor of Structural Engineering, University of Genoa

2000-..... Full Professor of Structural Engineering. University of Genoa

2003-2005 Deputy Dean of the Faculty of Engineering, University of Genoa

2008-2014 President of the Master Course on Architectural Engineering, University of Genoa

2009-2014 Coordinator of the PhD course on Structural and Geotechnical Engineering, University of Genoa

## **TEACHING (at present)**

- Structural design, Bachelor curse on Civil and Environmental Engineering, University of Genoa
- Structural retrofitting and strengthening techniques, M.Sc. course on Engineering for Building Retrofitting, University of Genoa
- Resilience of the built environment, M.Sc. course on Engineering for Building Retrofitting, Univ. of Genoa
- Strengthening of historical buildings, Postgraduate course on Restoration of monuments, Univ. of Genoa

### **BIBLIOMETRIC INDICATORS**

28/07/2021: 118 Journal Papers on Scopus, H-index: 33, # citations: 4241. 304 Published Papers on Google Scholar, H-index: 46, # citations: 9279.

## RESEARCH TOPICS

- Numerical modelling of masonry structures
- Nonlinear static (pushover) and incremental dynamic analyses
- Probabilistic and practice-oriented procedures for the seismic assessment of existing masonry buildings
- Seismic risk, vulnerability and loss analysis
- Post-earthquake damage assessment and vulnerability of churches
- Retrofitting of ancient buildings and historical centres
- Preservation of cultural heritage structures

#### COORDINATION OF RESEARCH PROJECTS

- Co-cordinator of the WP4 "MARS (Seismic Risk Maps and Damage Scenario" within the project ReLUIS (2019-2021), funded by the Civil Protection Department (<a href="www.reluis.it">www.reluis.it</a>)
- Coordinator of the FP7 European project PERPETUATE PERformance-based aPproach to Earthquake proTection of cUlturAl heriTage in European and mediterranean countries (<a href="www.perpetuate.eu">www.perpetuate.eu</a>)
- Co-cordinator of the Task "Vulnerability of masonry buildings" within the projects ReLUIS (2005-2008), ReLUIS2 (2010-2013) and ReLUIS3 (2014-2018), funded by the Civil Protection Department (www.reluis.it)
- Coordinator of the PRIN project "Analysis and modelling of multi-leaf masonry structures for the protection of built heritage", funded by the Ministry of University and Research
- Coordinator of the GNDT 2000-2002 project "Seismic scenario in Western Liguria Region", funded by the National Group for the Defence from Earthquakes
- Coordination of many applied researches, funded by Local Authorities and Private Companies.

### EDITORIAL BOARD MEMBERSHIP

- "Earthquakes and Structures" (Eds. S.A. Anagnostopoulos, I. Takewaki and J.P. Lynch)
- "Frontiers in Built Environments" (Ed. Izuru Takewaki)
- "International Journal on Seismic Engineering Ingegneria Sismica" (Ed. G. Benzoni)
- "Progettazione sismica" (Ed. M. Calvi)
- Guest Editor of the Special Issue "Performance-Based Assessment of Cultural Heritage Assets: Outcomes of the European Project PERPETUATE" of the Bulletin of Earthquake Engineering, 13(1), 2015

# **INVITED LECTURES (in the last 4 years)**

- Keynote Lectures at International Conferences
- ANIDIS 2019 XVIII Convegno "L'Ingegneria Sismica in Italia", Ascoli Piceno, September 15-19, 2019
- 16ECEE 16<sup>th</sup> European Conf. on Earthquake Engineering, Thessaloniki, June 18-21, 2018
- European Conf. on Earthquake Engineering and Seismology, Istanbul, August 25-29, 2014
- 2ECEES 2<sup>nd</sup> European Conf. on Earthquake Engineering and Seismology, Istanbul, August 25-29, 2014
- SAHC2014 9<sup>th</sup> International Conference on Structural Analysis of Historical Constructions, Mexico City, October 14-17, 2014
- Romanian 5<sup>th</sup> National Conference on Earthquake Engineering, Bucharest, June 19-20, 2014
- 2012 EERI Annual Meeting & National Earthquake Conference, Memphis, April 11-12, 2012
- 4<sup>th</sup> Japan–Greece Workshop on "Seismic Design of Foundations, Innovations in Seismic Design, and Protection of Cultural Heritage", Kobe (Japan), October 6-7, 2011
- XIV ANIDIS (L'ingegneria sismica in Italia), Bari (Italy), September 18-22, 2011 (in Italian)
- Invited Lectures at Workshops, Seminars and Courses
- Skellig Michael Research/Publication Seminar, Dublin, April 21, 2015
- NERA Project seminar "Field testing and seismic vulnerability assessment", Wien, September 25, 2014
- ICOMOS Macedonian Regional Symposium, Skopje, March 10, 2014
- Three seminars in New Zealand on "Seismic Assessment of Existing Masonry Buildings":
  - o "Seismic vulnerability of ancient masonry structures: post-earthquake actions and preventive mitigation strategies", Christchurch, February 18, 2014
  - o "Seismic assessment of existing masonry buildings", Auckland, February 19, 2014
  - o "Preservation of cultural heritage masonry structures in seismic areas: vulnerability models for risk analysis on territorial scale", Wellington, February 20, 2014
- Course on "Seismic Vulnerability and Strengthen of Old Masonry Buildings", Lisbon, June 6-7, 2013
- Workshop on "Implementation of the EC8-Part3: Assessment and interventions, on buildings in earthquake prone areas", Athens, April 12, 2013
- EPPO Seminar on "The protection of the integrity of monuments under seismic actions", Thessaloniki (Greece), November 4-5, 2011
- "Seismic rehabilitation of ancient constructions", Lisbon (Portugal), November 8, 2011

#### ACTIVITY IN DRAFTING PANELS OF STANDARDS

- Member of the Project Team 3, in charge with the revision of the Eurocode 8 (Design of structures for earthquake resistance) Part 3 (Assessment and retrofitting of buildings and bridges)
- At present I am acting as a member of the Italian Commission UNI/CT 021, Structural Engineering, which is the national mirror group to CEN/TC 250 activities
- Revision of OPCM 3274/2003, the seismic code issued in Italy by the Civil Protection Department after the Molise earthquake (2002)
- NTC 2008 (Italian Building Code) and Instructions for NTC 2009 (chapters "7.8 Design of masonry buildings" and "8 Assessment and retrofit of existing buildings")
- Person in charge for drafting the Italian Guidelines for cultural heritage structures, issued in 2007 by the Ministry of Cultural Heritage and Civil Protection Department (afterwards, I served in the drafting panel of the updated release of these Guidelines (2011), lined up with the Italian Building Code, NTC 2008)
- Instructions CNR-DT212 (2013) "Probabilistic seismic assessment of existing buildings" (member of the small drafting panel)