

Luigi Gambarotta

Full professor

- luigi.gambarotta@unige.it
- **+** 39 010 353 2556
- **+** 39 010 209 5806

Education and training

1977

Laurea (five years) Civil Engineering

Elastoplastic fracture in sheets containing linear cracks - 110/110 cum laude University of Genoa - Genoa - IT

Academic experience

1983 - 1987

Researcher Structural Engineering

University of Genoa - Genoa - IT

1987 - 1994

Associate professor of Computational Mechanics

University of Genoa - Genoa - IT

1994 - 1996

Professor of Solid and Structural Mechanics

University of Messina - Messina - IT

1996 - **ONGOING**

Professor of Solid and Structural Mechanics

University of Genoa - Genoa - IT

Language skills

English

Independent

Teaching activity

 $\textbf{MODULE 1 STRUCTURAL MECHANICS I} \ (\textbf{modulo di: SCIENZA DELLE}$

COSTRUZIONI I - cod: 72506) (cod: 72507) INGEGNERIA

STRUCTURAL MODELLING OF EXISTING BUILDINGS (modulo di: STRUCTURAL MODELLING AND ANALYSIS OF EXISTING BUILDINGS - cod: 98106) (cod: 98149) INGEGNERIA

THEORY OF STRUCTURES (modulo di: TEORIA E PROGETTO DI STRUTTURE - cod: 86838) (cod: 86835) ARCHITETTURA

Research interests

Luigi Gambarotta covered a wide range of subjects in the fields of structural and materials mechanics, with particular reference to theoretical and computational problems relevant to non-linear material responses. The main scientific results may be schematically divided in eight main subjects: Fracture Mechanics, Non-linear analysis of plastic frames, Constitutive modelling of frictional materials, Damage Mechanics, Masonry Mechanics including Masonry buildings and masonry bridges, Biomechanics, Multiscale modelling of inhomogeneous materials, Modeling and design of acoustic materials with periodic microstructure.

He cooperates as a reviewer with the following international journals: International Journal of Solids and Structures, European Journal of Mechanics /Solids, Computer Methods in Applied Mechanics and Engineering, Engineering Fracture Mechanics, International Journal of Fracture, Journal of Sound and Vibration, Int. J. Nonlinear Mechanics, Int. J. Multiscale Computational Engineering, Meccanica, Strain, Engineering Structures, Mechanics of Structures and Machines, Structural Engineering and Mechanics, Journal of Engineering Mechanics ASCE, Journal of Bridge Engineering ASCE, Acta Geotechnica, Redakcja Studia Geotechnica et Mechanica, Journal of Earthquake Engineering, Earthquake Spectra, Bulletin of Earthquake Engineering, Soil Dynamics and Earthquake Engineering, Construction & Building Materials, International Journal of Architectural Heritage, Journal of Biomechanics, Biomechanics and Modelling in Mechanobiology, IEEE - Transactions on Biomedical Engineering.

Grants

2016 - ONGOING

Multi-scale mechanical models for the design and optimization of micro-structured smart materials and metamaterials

MIUR - IT 9500000 - Participant

Editorial activity

Editor in Chief MECCANICA, Springer https://link.springer.com/journal/11012