Antonino Morassi
Curriculum Vitae – Extended version (May 2022)

Antonino Morassi
Professor of Mechanics of Solids and Structures
Polytechnic Department of Engineering and Architecture
University of Udine

Graduated in Civil Engineering at the University of Udine in 1989 with the grade 110/110 with praise; thesis: "Determinazione dinamica di parametri strutturali" (Dynamical determination of structural parameters).
Graduated in Mathematics at the University of Trieste in 2001 with the grade 110/110 with praise; thesis: "Problemi non ben posti ed inversi per il sistema di Lamé" (Inverse and ill-posed problems for the Lamé system).
Associate professor of Strength of Materials at the University of Udine from November 1998 to December 2003.
In February 2002 he won a national competition for full professor of Strength of Materials. From December 2003 he is full professor of Mechanics of Solids and Structures at the University of Udine.
He visited in 1994 the Solid Mechanics Division of the University of Waterloo (Ontario, Canada); in 1995 the Department of Mathematics of the Kentucky University (Lexington, Kentucky, USA); in 2003, 2004 and 2008 the Department of Mathematical Sciences of the Hokkaido University (Sapporo, Japan); in 2013-2019 the Department of Mechanical Engineering and the Department of Continuum Mechanics and Structural Analysis of the University Carlos III of Madrid (Madrid, Spain); in 2017-2018 the Polytechnic School of the University of São Paulo (São Paulo, Brazil).
He is Associate Editor of the Journal of Vibration and Control (October 2015-).
He is Member of the Editorial Board of Mechanical Systems and Signal Processing (June 2016-).
He is Member of the Editorial Board of Vibration (November 2019-).
He acts as reviewer for several international journals (Mechanical Systems and Signal Processing, Journal of Sound and Vibration, Inverse Problems, Engineering Structures, and others).

In his scientific activity he treated general and applied inverse problems in structural identification through non-destructive methods, such as damage identification in vibrating systems, identification of inclusions in elastic bodies, and characterization of isospectral and quasi-isospectral beams. On these topics he developed an extensive experimental activity on the use of modal analysis techniques for monitoring, structural identification and damage detection, with applications to medium-scale models (beams, frames) and to full-scale structures (buildings, chimneys, bridges, water-tanks). In the past, he studied theoretical problems for thin structures in linear elasticity, giving a justification of some classical theories for the determination of the stress field in thin tubes.

His most recent research interests concern the modelling of complex vibrating systems, such as nanobeams and spider orb-webs, and the identification of their mechanical properties by dynamic non-destructive measurements. This study is developed in collaboration with research groups of the Department of Continuum Mechanics and Structural Analysis of the University Carlos III of Madrid, Spain, and of the Polytechnic School of the University of São Paulo, Brazil.

The results of his research have been published in major international journals. He is the author of about one hundred and ten papers published in peer-reviewed international journals, which received 2,380 citations; the personal h-index is equal to 29 (from Web of Science; May 2022).

He received by the University Carlos III of Madrid (Spain) a "Cátedra de Excelencia" for the academic year 2013-14 for the research project "Non-destructive evaluation techniques for identification and diagnosis of mechanical systems, and related inverse problems ".

He was the principal investigator of the National Research Project "Non-destructive testing for identification and diagnosis of materials and structures" (MURST Project 2003082352, 2003-2005). Research Units of the University of Bologna, Catania, Milano (Politecnico), Reggio Calabria, Torino (Politecnico) and Udine were involved in this Project.

He was the coordinator of the Advanced School "Dynamic methods for damage detection in structures", International Centre for Mechanical Sciences (CISM, Udine), October 10-14, 2005.

He was the coordinator (with prof. Roberto Paroni) of the Advanced School "Classical and advances theories of thin structures: mechanical and mathematical aspects", International Centre for Mechanical Sciences (CISM, Udine), June 5-9, 2006.

He was the coordinator (with prof. G.M.L. Gladwell) of the Advanced School "Dynamical inverse problems: theory and application", International Centre for Mechanical Sciences (CISM, Udine), May 25-29, 2009.

He was the coordinator (with prof. F. Benedettini) of the Advanced Professional Training Course "Monitoring, control and identification of bridges by dynamic methods", International Centre for Mechanical Sciences (CISM, Udine), May 24-28, 2010.