

Short Bio

Antonio Zippo

Professor Antonio Zippo is a mechanical engineer holding a PhD in "Advanced Mechanics and Vehicle Techniques." Currently serving as an Associate Professor of Mechanism and Machine Theory, Applied Mechanics, and Mechanical Vibration since June 1, 2023, he is an integral part of the "Enzo Ferrari" Department of Engineering at the University of Modena and Reggio Emilia - UNIMORE.

His academic contributions are complemented by notable research endeavors, supported by grants and funding:

- "Identification, Modeling, and Analysis of Nonlinear EMG Signals of Pathological Tremor"
- "Modeling and Experimental Measurements of Non-Linear Complex Systems Aimed at the Active Control of Essential and Parkinsonian Tremor"
- International Higher Education School in NVH for Industry 4.0 Project.

Professor Zippo has actively contributed to various international, European, and national research projects, including but not limited to: COMETA, NATO (composite metamaterials), THEORETIC (Electric Powertrain), DIADEM (Diagnostics and Innovative sensors), REFIMAN (industrial retrofitting), METaGEAR POR- FESR (Gears, Materials, Robotics), INDGEAR, EU-Fp7 (condition monitoring) and HPGA Fortissimo, EU-Fp7 (applications of high performance computing), DIAPRO4.0 (Diagnostics and Prognostics), "Omnidirectional Earthquake Isolation System", INDGEAR (condition monitoring).

Professor Zippo holds teaching responsibilities for courses in Multibody Dynamics, Mechanical Vibration, Applied Mechanics of the Vehicle, Dynamic testing of the Vehicle, Diagnostic and Predictive Maintenances.

His significant contribution to the field is reflected in the publication of 16 articles in international journals, 54 articles for international conferences, and 1 book chapter. Acknowledging his excellence, he received the National Scientific qualification as full professor in the Italian higher education system, in the call 2021/2023 for the disciplinary field of 09/A2 - Applied mechanics. (Academic Recruitment Field 09/A - Mechanical and aerospace engineering and naval architecture, according to the national classification) starting from the 29/11/2023. Bibliometrics profile: h-index of 10 and 326 citations.

Professor Zippo's research endeavors are centered around experimental tests, modeling, and numerical simulations in complex nonlinear dynamics. His expertise extends to linear and nonlinear vibration analysis of mechanical systems, nonlinear vibrations of structures and control, chaos, and nonlinear time series analysis, non-smooth dynamics, diagnostic, prognostic, predictive maintenance, condition monitoring of complex systems, fluid-structure interaction, the effect of thermal gradients, and bioengineering. He is an esteemed member of the Vibration, NVH, and Powertrain Laboratory within the Department of Engineering "Enzo Ferrari", University of Modena and Reggio Emilia, Italy.