

**Name**

Gianluca Gatti

Role

Assistant Professor

Short CV

Gianluca Gatti received his Laurea cum laude in Mechanical Engineering in 2001 from the University of Calabria. In 2003 he joined the Institute of Sound and Vibration Research (UK) for twelve months as a Marie Curie Host Fellow, under the framework of the European Doctorate in Sound and Vibration Studies. He obtained his Ph.D. in Mechanical Engineering in February 2005 at the University of Calabria, where he is now Assistant Professor from November 2005. He has been involved in research and/or teaching activities as a Visiting Academic at the University of Southampton (UK) and at the Universidade Estadual Paulista (Brazil).

Teaching Activity

- Professor of Mechanics of Robots, Master Degree in Mechanical Engineering
- Professor of Modelling and Simulation of Mechanical Systems, Master Degree in Automation Engineering

Selected Publications

- G. Gatti, Uncovering inner detached resonance curves in coupled oscillators with nonlinearity, *Journal of Sound and Vibration* 372 (2016) 239-254
- B. Tang, M.J. Brennan, G. Gatti, N.S. Ferguson, Experimental characterization of a nonlinear vibration absorber using free vibration, *Journal of Sound and Vibration* 367 (2016) 159-169
- G. Gatti, M.J. Brennan, M.G. Tehrani, D.J. Thompson, Harvesting energy from the vibration of a passing train using a single-degree-of-freedom oscillator, *Mechanical Systems and Signal Processing* 66-67 (2016) 785-792
- G. Gatti, On the estimate of the two dominant axes of the knee using an instrumented spatial linkage, *Journal of Applied Biomechanics* 28(2) (2012) 200-209
- M.J. Brennan, G. Gatti, The characteristics of a nonlinear vibration neutralizer, *Journal of Sound and Vibration* 331(13) (2012) 3158-3171
- G. Gatti, M.J. Brennan, I. Kovacic, On the interaction of the responses at the resonance frequencies of a nonlinear two degree-of-freedom system, *Physica D: Nonlinear Phenomena* 239(10) (2010) 591-599

Research lines

- nonlinear vibrations
- vibration control
- vibrational energy harvesting
- kinematic synthesis and analysis of mechanisms
- mechanics of robotic systems
- dynamics of machines
- biomedical devices for rehabilitation

- simulation of mechanical systems