## Prof. Ing. David Vetturi

Born in Salò on March 30th 1968, he attended the "E. Fermi "di Salò and subsequently the Faculty of Engineering of the University of Brescia.

He graduated in Mechanical Engineering in July 1993, with a thesis on the analysis of telemetric data of racing cars and the development of models for the study of vehicle dynamics, collaborating with Dallara Automobili of Varano de Melegari (PR) (1992) and Scuderia Italia of Brescia (1992-93) on cars of the F1 championship.

Later he obtained the Ph.D. in Applied Mechanics (IX Cycle) with a dissertation entitled "Modeling of dynamic systems for the design of motor vehicles".

From May 1997 to February 2005 he worked as a Researcher at the Department of Mechanical Engineering - Engineering Faculty of the University of Brescia in the scientific disciplinary sector ING-IND 12 (I06X) "Mechanical and Thermal Measurements". The areas of research in which he operated are: the study of the dynamics of the vehicle and of the related measurement systems; the development of soft-computing algorithms for the analysis of mechanical systems (neural networks and genetic algorithms); experimental analysis of the dynamic behavior of elastomeric materials and of rubber-metal components for automotive applications; development of an automatic calculation code for the analysis of the behavior of anti-vibration devices for the automotive sector; problems concerning vibration measurements. Author of numerous scientific publications presented both nationally and internationally.

Since March 2005 he is Associate Professor at the Faculty of Engineering of the University of Brescia within the disciplinary scientific sector ING-ING 12 - Mechanical and Thermal Measurements.

Among the most significant collaborations in research activities are those with CFGomma di Passirano (BS) and with Centro Ricerche Fiat on the topic of the dynamic characterization of rubber-metal components for the automotive sector, and with Thales Alenia Spazio in the context of activities research in the aerospace field. Significant was the participation in the preventive analysis part of the flight instrument of the joint ESA - NASA mission named Planck (launch in 2009) and the design of the ESA mission named Lisa Pathfinder. As part of a collaboration with the Department of Civil Engineering, Architecture, Territory, Environment and Mathematics of the University of Brescia, he has worked on developing measurement techniques to assess the level of comfort perceived on board of transport vehicles Local Public also in relation to road infrastructures. The research began in 2011 and continues. Currently, the research deals with the analysis of entire transport lines in urban areas and aims to improve the attractiveness of public transport as a mobility system in urban areas, including through the good planning of infrastructures.

For some years he has also been dealing with issues relating to Industrial Metrology both in the field of scientific and applied research, collaborating with various companies in the sector.

In addition to the academic activity dedicated to teaching and research, he has carried out professional activities in various fields of engineering.

He is the author of numerous scientific publications in international journals.