

## **Prof. Stefano Melzi, PhD**

Politecnico di Milano, Department of Mechanical Engineering

### **Personal profile**

Graduated in Mechanical Engineering in 1999 at Politecnico di Milano, joined the Department of Mechanical Engineering during the same year, entering the Ph.D course in Applied Mechanics. Assistant Professor since 2001, he obtained the Ph.D in 2003, became Associate Professor in 2014 and Full Professor in 2022.

He has been teaching Vehicle Dynamics for the BSc in Mechanical engineering since the Academic Year 2003-2004. Since the AY 2011-2012 he has taught a number of other courses for Mechanical, Aerospace and Energy Engineering, and currently holds the course of Mechanical System Dynamics for the MSc in Mechanical Engineering.

His research activity deals with the dynamics of mechanical systems, with a particular focus on road and railway vehicles. Most of the research has been carried out in cooperation with companies operating in the automotive and railway fields. Working with industrial partners allowed to join theoretical and experimental aspects, constantly looking at the practical application as the outcome. In more than 20 years he gained experience and developed skills in experimental characterization of ground vehicles and their components, modelling techniques for complex systems, new sensing devices (like smart tires), signal processing and real-time applications.

In 2020 he joined a research group of six professors to set up DRISMI (<https://www.drismi.polimi.it/>), a new laboratory of Politecnico di Milano based on DIM-400 dynamic driving simulator. Since mid-2021 he has started using this facility to analyse the interaction between drivers and ADAS systems.

Altogether, his research has led to the publication of 3 international patents and 110 works at international level, 43 of which in peer-reviewed journals.