

## **Dynamics and stability of mechanical systems**

### **Organizers:**

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The mini-symposium on “Dynamics and Stability of Mechanical Systems” is promoted by the AIMETA group “Dinamica e Stabilità - GADeS” in the spirit of the GADeS aims, that is the promotion of the scientific interaction between researchers from different backgrounds, operating in the fields of Applied Mathematics and Dynamical Systems, Applied Mechanics and Machine Dynamics, Solid and Structural Dynamics, independently from the scientific sector, thus in coherence with the AIMETA's statutory spirit. Moreover, the integration of researchers, who are studying particular and/or complementary problems, such as Identification and Control problems, appears very important since it can enlarge the range of interests of the Group. The proposed mini-symposium offers multi-disciplinary topics, among which the main ones are:

- Dynamics and stability of mechanical systems
- Chaotic systems and complexity
- Fluid-soil-structure interactions
- Buckling and post-buckling of structures
- Stochastic dynamics
- Non-smooth systems
- Inverse problems, identification, optimization, model updating
- Nonlinear time series analysis
- Active, passive, semi-active and hybrid control
- Vibration analysis, control and isolation
- Discretization, meshless, sub-structuring and modal reduction methods
- Friction-induced vibrations
- Materials with memory: mechanical & thermodynamic behavior
- Biological tissues mechanics
- Composite materials and phase transitions
- Bio-inspired materials and devices
- Piezoelectric systems