



**TITLE: Uncertainty and Sensitivity Analysis of ARMA models for Structural Health Monitoring**

## RESEARCH ACTIVITIES:

1. Bibliographic research on ARMA models and Global Sensitivity Analysis
2. Matlab code development for ARMA model fitting
3. Matlab code development for Monte Carlo simulations
4. Simulations of dynamic mechanical systems in damaged scenarios
5. Performance evaluation in terms of uncertainty and sensitivity
6. Experiments on a testing workbench

**DURATION: 10-13 months**

**CONTACTS:**

[giorgio.busca@polimi.it](mailto:giorgio.busca@polimi.it)

[alfredo.cigada@polimi.it](mailto:alfredo.cigada@polimi.it)

