

# Experimental Analysis of Nonlinear Vibrations

## First Edition



September 20 – 21, 2018



Leuven, Belgium



Course fee: 300 EUR (including lunches and coffee breaks)

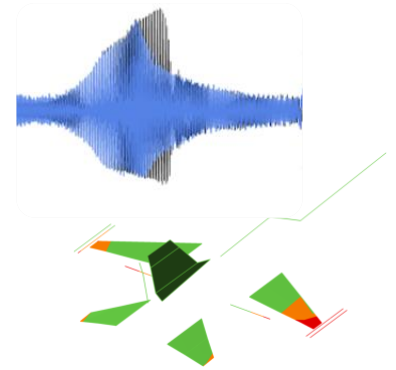
Applications to be sent to [training@nolisys.com](mailto:training@nolisys.com) by June 15, 2018

Coordinated by Prof. G. Kerschen

Space Structures and Systems Laboratory, University of Liège, Belgium

### Course Description

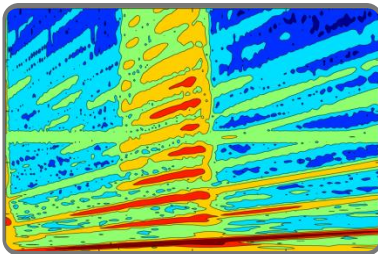
The course is intended to provide deep insights into the impact of nonlinearities in structural dynamics. The originality of this course is to cover the different steps related to nonlinear test campaigns, from the construction of a nonlinear setup to the comprehensive nonlinear analysis of measurements. Rigorous theoretical and experimental approaches will be described, and hands-on practice will help attendees gain experience with the new concepts and tools.



### Course Outline

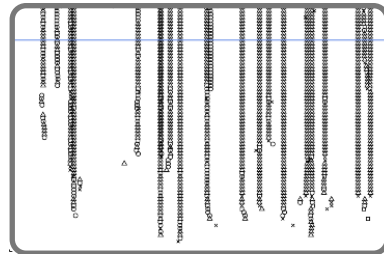
Classical lectures illustrated using real-life applications will alternate with training sessions based on the NI2D® software developed by NOLISYS.

#### Day 1



- Nonlinearity in practice
- Building a nonlinear setup
  - Detection
  - Characterization

#### Day 2



- Parameter estimation
  - Nonlinear modes
- Experimental modal analysis

