



2019 IEEE INTERNATIONAL WORKSHOP ON

# Metrology for AeroSpace

TORINO, ITALY | JUNE 19 - 21, 2019

## CALL FOR PAPERS for the Special Session on **STRUCTURAL HEALTH MONITORING AND NONDESTRUCTIVE TESTING FOR AEROSPACE**

### ABSTRACT

Within the field of aerospace structural design, Non-Destructive Testing and Evaluation (NDT&E) is one of the most critical aspects. In fact, today, with the aim to guarantee the safety for both persons and components in the aerospace field, a wide range of NDT procedures ensure that not a single manufactured component reaches service without first passing a series of stringent tests. New researches in this field have strategic and essential role in order to reduce the NDT costs and improve the test performance. As natural evolution of NDT procedures, Structural Health Monitoring (SHM) has been developing fast with the aim to reduce maintenance costs and limit design constraints. Continuous monitoring of aerospace components ensures high levels of safety reducing the number of inspections as well. This Special Session aims to represent a forum for researchers and practitioners from industry, academia, and government interested in methods, systems, and devices for NDT and SHM of equipment for aerospace security and maintenance.

### TOPICS

Topics for this Special Session include but are not limited to:

- Methods and systems for designing, optimizing, and characterizing NDT instruments and devices
- New NDT investigation methods
- New SHM methodologies and damage assessment criteria
- Methods and devices to optimize the performance of existing NDT techniques
- Data processing and advanced techniques for NDT and SHM measurements
- Sensors and Transducers for NDT/SHM in aerospace applications
- Advanced techniques for NDT measurements
- Reliability of NDT/SHM

### ABOUT THE CONVENERS

Since 2006, **Marco Laracca** is Assistant Professor of Electrical and Electronic Measurements at the University of Cassino, Italy. Research interests: measurement systems for Non Destructive Testing via Eddy Current, sensor realization and characterization, power quality measurements, electric measurement under non sinusoidal conditions.

**Leandro Maio** is Assistant Professor at the Department of Industrial Engineering, University of Naples "Federico II". His research interests focus mainly on modeling of the materials behavior, structural health monitoring based on guided waves, aircraft deicing, low velocity impacts, adhesive bonding.

**Vittorio Memmolo** is Research Fellow at University of Naples "Federico II", Department of Industrial Engineering. His main research interests include structural health monitoring, load monitoring, measurements for SHM, mechanics of composites.

### ORGANIZED BY



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