



2020 IEEE INTERNATIONAL WORKSHOP ON

Metrology for AeroSpace

PISA, ITALY / 22-24 JUNE, 2020

»»»» CALL for PAPERS ««««

For the special session on

SENSORS AND DATA FUSION TECHNIQUES, VIRTUAL AND SYNTHETIC SENSORS, ANALYTICAL REDUNDANCY AND STATE OBSERVERS FOR AVIONICS

» ABSTRACT

With modern technologies, on board systems moved towards digital solutions for a better integration with the modern digital avionics towards a more electrical aviation that is a technological transition necessary to achieve the goals defined by the European Community. Fly-by-wire (FBW) paradigm is successfully applied today to large aircraft and tomorrow it will belong to small aircraft (SAT), urban mobility aircraft (UAM) and unmanned aerial systems (UAS). These aircraft categories have different requirements from commercial aviation and they need innovative technologies. This special session aims to collect solutions, findings and new challenges from the academic and industrial world for current and next generation aircraft. The forum will deal with activities in the field of identification, observation and estimation of flight data without using dedicate sensors but exploiting analytical techniques and sensor fusion techniques.

» TOPICS

Topics for this Special Session include (but not limited to):

- Metrology of virtual sensors;
- Methods and systems;
- Validation methods: simulation and flight test;
- Data processing;
- Airworthiness regulations and Certification Process;
- Demonstrators;
- Sensors and Transducers for Avionics;
- Reliability Analysis

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» ABOUT THE CONVENER

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