

## S03 Experimental mechanics

Organizers:

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The session will focus on selected aspects of experimental mechanics of solid bodies, i.e.:

- highlighting latest innovations, R&D and industrial activities in area of experimental methods in mechanics,
- providing forum for discussion of the latest research results, new developments of concepts and technologies, proven techniques, as well as practical applications and standardization of the experimental methods in mechanics.

Main topics:

- Material characterization and testing: smart materials, residual stress, fatigue, fracture, creep.
- Structural analysis: experimental tests, structural health monitoring, system identification, damage assessment, self-adaptive structures.
- Instrumentation: optical methods (DIC, ESPI), new sensors and actuators, advanced measurement systems, validation and reliability of instrumentation.
- Integration of mathematical/numerical methods with experimental mechanics.
- Practical applications and case studies.