

Call for Papers

Structural Dynamics Specialists

Technical Discipline Chair: William Welsh (bill.a.welsh@lmco.com)

Deputy Technical Discipline Chair: Rafael Palacios (r.palacios@imperial.ac.uk).

Themes, with contact information

1) Adaptive Morphing Flexible Wings

For more information, please contact Weihua Su, suw@eng.ua.edu

2) **Advanced Wind-Turbine Co-Design**

Of special interest are papers related to floating wind turbines, Control-co-design and wave energy converters.

For more information, please contact Todd Griffith, tgriffith@utdallas.edu

3) Aeroelastic/Aeroservoelastic Wind Tunnel Testing for Future Aircraft Development

For more information, please contact Alessandro Scotti, ascotti@pilatus-aircraft.com

4) Aeroelastic prediction workshop progress

For more information, please contact Walter A Silva, walter.a.silva@nasa.gov

5) Dynamics and prognostics of advanced materials

For more information, please contact Seetha Raghavan, seetha.raghavan@ucf.edu

6) **Dynamics to Enable high speed / novel rotorcraft**

High speed rotorcraft have unique challenges related to vibration and stability. This session will include technologies to address these challenges. The session will also include dynamics challenges/ solutions related to co-axial rotors, tilt rotors, eVtol, urban air mobility, off-planet vehicles, enhanced damping and vibration control approaches.

For more information, please contact Bill Welsh, bill.a.welsh@lmco.com

7) **Extreme structural efficiency for environmentally-friendlier aircraft**

Of special interest are approaches for green aircraft including on-wing devices to enhance efficiency on ultra-high aspect ratio wings.

For more information, please contact Jonathan Cooper, J.E.Cooper@bristol.ac.uk

8) Flight Aeroservoelastic Testing of Future Aircraft Concepts

For more information, please contact Jonathan Cooper, J.E.Cooper@bristol.ac.uk

9) Innovative control strategies for next-generation gust and maneuver load alleviation systems

The focus of this theme is on state-of-the-art control/aeroelastic modelling techniques and sensor/actuator development, with a feasible path towards prototype implementation, that have the potential to achieve radical reductions in wing loading on next generation aircraft.

For more information, please contact Rafael Palacios, r.palacios@imperial.ac.uk

10) Novel Testing Techniques for Future Flight Vehicle certification

For more information, please contact Giuliano Coppotelli, giuliano.coppotelli@uniroma1.it

11) Shape Adaptive Blades for Rotorcraft Efficiency (SABRE)

For more information, please contact Ben Woods, ben.k.s.woods@Bristol.ac.uk

12) Space Structural Dynamics of Evolving Systems: In-Space Assembly and Maintenance

This session will include next-generation technologies, novel experimental testbeds and foundational case studies addressing the unique structural dynamics challenges for multi-component space systems that are assembled and maintained on-orbit arising from their changing configurations, deployment subsystems, moving masses, docking excitations, internal disturbances, embedded devices and nonlinear modal coupling, among others.

For more information, please contact Suzanne Weaver Smith, suzanne.smith@uky.edu