

## STRUCTURAL AND MULTIDISCIPLINARY OPTIMIZATION

J.F. A. MADEIRA<sup>\*†</sup>, H. C. RODRIGUES<sup>†</sup>

\* IDMEC/IST  
Av. Rovisco Pais, 1049-001 Lisboa, Portugal  
[jaguilar@dem.ist.utl.pt](mailto:jaguilar@dem.ist.utl.pt)

† IDMEC/IST  
Av. Rovisco Pais, 1049-001 Lisboa, Portugal  
[hcr@ist.utl.pt](mailto:hcr@ist.utl.pt)

† ISEL  
Rua Conselheiro Emídio Navarro, 1, 1059-007 Lisboa, Portugal

**Key words:** Structural optimization, multidisciplinary optimization.

### ABSTRACT

The purpose of this session is to bring together researchers who successfully develop techniques for solving structural and multidisciplinary optimization problems (single and multi-objective). We encourage new research into all aspects of the optimal design of structures as well as multidisciplinary design optimization where the involved disciplines deal with the analysis of solids, fluids or other field problems.

This special session aims to provide a forum for researchers from Theoretical developments for single or multi-objective optimization as well as their application for solving real engineering problems. Submissions presenting novel developments or critical reviews are welcome.

Topics to be covered include (but are not limited to):

- Optimization applications in automobile design, aircraft design, manufacturing, etc...
- Numerical Optimization Techniques
- Experimental Optimization Techniques
- Shape and Topology Optimization
- Structural Optimization
- Surrogate-based Optimization
- Multidisciplinary Optimization
- Multi-objective Optimization
- Robust and Reliability-based Design Optimization