**Multidisciplinary Design Optimization**

Please direct questions to:

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The Multidisciplinary Design Optimization (MDO) Technical Committee has been bringing together industry practitioners, government employees, and academics to present and discuss the latest developments in multidisciplinary design, analysis, and optimization for decades.

With significant progress in algorithms and computing power, multidisciplinary optimization has been successfully carried out for problems ranging from the design of individual components to complex system. Additionally, theoretical advances, from new optimization algorithms to approaches for robust and reliability-based design are playing an ever-growing role in this rapidly evolving field.

Technical papers are sought in areas related to the application of numerical optimization, uncertainty quantification, multi-fidelity analysis methods, and machine learning approaches to multidisciplinary and single disciplinary design optimization.

* Aerodynamic Design Optimization
* Application of MDO for Vehicle Design
* Optimization in Design (joint MDO/DE)
* Design Under Uncertainty (joint MDO/NDA)
* Emerging Methods, Algorithms, and Software Development in MDO
* Machine Learning and Optimization
* MDO with Model-Based Design Engineering
* MDO/Sensitivity Analysis with Aeroelasticity/Fluid-Structure Interaction
* Metamodeling, Reduced Order Models, and Approximation Methods
* Optimization with Digital Thread
* Use of Optimization in Design Under Uncertainty
* Physics-Informed Machine Learning (joint MDO/NDA)
* Shape and Topology Optimization
* Structural Optimization, Composite Material Design, Optimization with Multiscale Modeling
* Special Session: Wait for suggestions from the MDO TC