

# Non-Deterministic Approaches at SciTech 2024

## Call for Papers Supplemental Information

Technical Discipline Chairs: Pankaj Joshi, ZAL Center of Applied Aeronautical Research  
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## Joint Session Topics

The following topics will be jointly hosted by Non-Deterministic Approaches (NDA) and corresponding technical disciplines:

Joint session between NDA and Guidance, Navigation, and Control (GNC), contact: Michael Niestroy ([michael.a.niestroy@lmco.com](mailto:michael.a.niestroy@lmco.com))

- Uncertainty Quantification and Analysis of Complex Aerospace Systems

Joint session between NDA and Materials (MAT)

- Uncertainty Quantification and Model Validation for ICME, contacts: Pankaj Joshi ([Pankaj.joshi@zal.aero](mailto:Pankaj.joshi@zal.aero)) for NDA, Jessica Piness ([jmpiness@gmail.com](mailto:jmpiness@gmail.com)) for MAT

Joint sessions between NDA and Multidisciplinary Design Optimization (MDO), contact: Graeme J. Kennedy ( [graeme.kennedy@aerospace.gatech.edu](mailto:graeme.kennedy@aerospace.gatech.edu) )

- Design Under Uncertainty
- Physics-informed Machine Learning
- Probabilistic Machine Learning for Uncertainty Quantification in Complex Systems

Joint session between NDA and Meshing, Visualization, and Computational Environments (MVCE), contact: Nitin Bhagat ([nbhagat1@udayton.edu](mailto:nbhagat1@udayton.edu))

- Mesh Quality, Adaptive Meshing, Error Estimation, and Uncertainty Quantification

Joint session between NDA and Wind Energy (WE), contact: **TBA**

- Uncertainty Analysis Advancements for Wind Energy Applications

Joint session between NDA and Structural Dynamics (SD), contact: Todd Griffith ( [tgriffith@utdallas.edu](mailto:tgriffith@utdallas.edu) )

- Uncertainty Quantification for Acoustics and Structural Dynamics