

# Non-Deterministic Approaches at SciTech 2023

## Call for Papers Supplemental Information

Technical Discipline Chairs: Diane Villanueva, MITRE ([dvillanueva@mitre.org](mailto:dvillanueva@mitre.org))  
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 Applied Aerodynamics (APA), contact: Kidambi Sreenivas ([Kidambi-Sreenivas@utc.edu](mailto:Kidambi-Sreenivas@utc.edu))

- Aerodynamic Design Under Uncertainty

Joint session between NDA and Digital Engineering (DGE), contact: John Matlik ([John.F.Matlik@Rolls-Royce.com](mailto:John.F.Matlik@Rolls-Royce.com))

- Uncertainty Quantification and Management in Digital Engineering and Digital Twins

Joint session between NDA and Guidance, Navigation, and Control (GNC), contact: Michael McFarland ([michael.b.mcfarland@rtx.com](mailto:michael.b.mcfarland@rtx.com))

- Uncertainty Quantification and Analysis of Complex Aerospace Systems

Joint session between NDA and Materials (MAT)

- Uncertainty Quantification and Model Validation for ICME, contacts: Barron Bichon ([barron.bichon@swri.org](mailto:barron.bichon@swri.org)) for NDA, Michael Sangid ([msangid@purdue.edu](mailto:msangid@purdue.edu)) for MAT

Joint sessions between NDA and Multidisciplinary Design Optimization (MDO), contact: Felipe Viana ([viana@ucf.edu](mailto:viana@ucf.edu))

- Design Under Uncertainty
- Physics-informed Machine Learning

Joint session between NDA and Meshing, Visualization, and Computational Environments (MVCE), contact: Stephen Nichols ([dsnichols@gmail.com](mailto:dsnichols@gmail.com))

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

Joint session between NDA and Wind Energy (WE), contact: Brent Houchens ([brent.houchens@sandia.gov](mailto:brent.houchens@sandia.gov))

- Uncertainty Analysis Advancements for Wind Energy Applications