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Proceedings of the 44th IMAC, A Conference and Exposition on Structural Dynamics 2026

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Description:

Model Validation and Uncertainty Quantification, Volume 3: Proceedings of the 44th IMAC, A Conference and Exposition on Structural Dynamics, 2026, the third volume of ten from the Conference brings together contributions to this important area of research and engineering. The collection presents early findings and case studies on fundamental and applied aspects of Model Validation and Uncertainty Quantification, including papers on:

- Model Validation for Digital Twinning
- Challenges on Model Form Uncertainty
- Surrogate Modeling
- Uncertainty Quantification and Propagation in Structural Dynamics
- Bayesian Methods
- MVUQ for Complex Systems

Keywords: Digital Twin, Model selection, Bayesian inference, Bayesian FE model updating, Normalizing flow, Correlation, MAC, Orthogonality, Model Validation, vibration, FRF, gaussian process, anti-resonance, Reduced Order Model, bayesian decision theory, cold-formed steel, seismic, modal characteristics, Nonstructural components, System identification