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Stochastic Model Order Reduction in Randomly Parametered Linear Dynamical Systems

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Highlights

- Stochastic model order reduction for randomly parametered linear dynamical structures
- Reduction in state-space dimension using SEREP
- Development of surrogate model in the reduced state space using PCE
- Significant savings in computational costs for reliability analysis of large systems
- Proposed methodology enables using existing commercial FE softwares

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