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Adaptive Monte Carlo analysis for strongly nonlinear stochastic systems

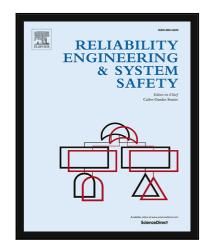
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Highlights

- Shows that optimal stratified designs are non-uniform for nonlinear systems.
- Illustrates that the benefits of an optimally non-uniform sample design can be substantial compared to space-filling designs.
- Proposes an adaptive approach that mitigates the practical challenges of achieving sample design optimality.
- The method is applied to modeling shear localization in amorphous solids with stochastic initial conditions.

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