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Structural reliability analysis with imprecise random and interval fields

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Highlights

- Structural reliability analysis with multi-imprecise random and interval fields is freshly investigated.
- The concept of robust structural reliability is extended to systems involving hybrid spatially dependent uncertainties.
- The unified interval stochastic reliability sampling (UISRS) method is proposed.
- CDFs of the extreme bounds of the structural responses can be established.
- Distributions of system outputs may not be Gaussian if various distributions of inputs are presented simultaneously.

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