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Design margins and handling of variations and uncertainty aiming for a Robust Design

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In a period of time when Artificial Intelligence and Machine Learning algorithms are taking over the analysis of our needs in product development. There is still important to be reminded where humans still have to question and control how new product designs handle the aspects of variation and uncertainty.

One part is the mapping of the variation of all aspects of design and production parameters. The second part is to question the safety margins as well as design margins. A third part is the uncertainty of computational models.

In this presentation the general theory for investigating design margins are discussed, and how this can be used for Robust Design optimization.

Type of presentation

Talk

Classification

Mainly methodology

Keywords

Design margin, Uncertainty, Robust design optimization

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