

Abstracts

A Novel Approach to Statistical Modeling Using Cumulative Probability Distribution Fitting

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A novel approach to statistical modeling is presented. The statistical model is directly extracted by fitting the cumulative probability distributions (CPDs) of the model responses to those of the measured data. This new technique is based on a solid mathematical foundation and, therefore, should prove more reliable and robust than the existing methods. The approach is illustrated by statistical MESFET modeling based on a physics-oriented model which combines the modified Khatibzadeh and Trew model and the Ladbrooke model (KTL). The approach is compared with the established parameter extraction/postprocessing approach (PEP) in the context of yield verification.

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