

## Implicit space mapping EM-based modeling and design exploiting preassigned parameters

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We present a simple new approach to EM-based microwave modeling and design. It is a special case of a novel concept we call Implicit Space Mapping. We propose to calibrate a suitable coarse model against a fine model (full wave EM simulation) by relaxing certain coarse model preassigned parameters. Our algorithm updates these preassigned parameters through parameter extraction, reoptimizes the coarse model to suggest a new EM design and terminates when relevant stopping criteria are satisfied. We illustrate our approach through an HTS filter example.

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