

Solving the time-dependent Maxwell equations by unconditionally stable algorithms.

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Abstract

We present a family of unconditionally stable algorithms, based on the Suzuki product-formula approach, that solve the time-dependent Maxwell equations in systems with spatially varying permittivity and permeability. Salient features of these algorithms are discussed. As an illustration we compute, as a function of cluster size, the spectrum of electromagnetic modes in a cluster of photonic bandgap material.

Beteiligte Forschungseinheiten

[Angewandte Systembiologie](#) [Marc Thilo Figge](#) [Mehr erfahren](#)

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