

## Fast Nonlinear Waveform Estimation for Large Distributed Networks

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A novel nonlinear waveform estimation method based on the Asymptotic Waveform Evaluation is presented. The method generates transient waveform estimation of large, distributed networks with arbitrary terminations, while using neither convolution nor numerical inversion techniques, both of which are found to be expensive for other methods. These are avoided due to the exponential form of the fundamental modes of the linear system. The linear network analysis speedup of waveform estimation, already demonstrated, is here supplemented for the nonlinear case.

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