Chair of Communications Engineering
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Ingenieurspraxis

Numerical Simulation of the Optical Fiber Channel with Higher-Order Nonlinear Effects

The Split-Step Fourier Method (SSFM) is used to numerically simulate the Nonlinear Schrödinger Equation, which models pulse propagation in the optical channel. The aim of this thesis is to implement the SSFM with higher-order nonlinear effects (self steepening and stimulated Raman scattering) and investigate the influence of these effects on pulse shape and energy

Advisors

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