

Optimal Control of 1D Non linear Schrödinger equation.

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Abstract

This talk is concerned with the optimal control of a 1D cubic nonlinear Schrödinger equation that describes the propagation of optical pulses. We consider the noise on an optical transmission systems as a control variable and study the existence of a minimum norm control such that the pulse is degraded at the end of the transmission. We also give first order necessary conditions for an optimal solution.

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