

Invited Paper: LEOS 2006, Montreal Canada, Oct. 29-Nov. 2

Spatial Solitons Along the Interface Between Discrete and Continuous Media

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Abstract: We report the first experimental observations of discrete Kerr (in AlGaAs) and quadratic (in PPLN) interface solitons propagating along the boundary between weakly coupled waveguide arrays and continuous media. Spatial solitons with adjacent channels in phase and 180° out of phase were observed.