Quantum-classical analogies in photonic lattices: Fourier transforms

H. M. Moya-Cessa

Instituto Nacional de Astrofísica, Óptica y Electrónica, Puebla, Mexico.

Optical analogies of quantum mechanical systems may help in the design of integrated optical structures [1]. This may be achieved because one can describe discrete systems, such as waveguide arrays in terms of Schrödinger-like equations by taking advantage that by choosing properly the (evanescent) interaction coefficients between the different waveguides, we may engineer particular setups that have a quantum counterpart. In the talk I will present some examples that model Fourier transforms [2,3].

