

Q 1 Hauptvorträge I

Zeit: Freitag 10:15–11:00

Raum: HU Audimax

Hauptvortrag

Q 1.1 Fr 10:15 HU Audimax

Novel physics in periodic systems: from photonic crystals and left-handed media to ultracold atoms in optical lattices — •YURI KIVSHAR — Nonlinear Physics Centre, Research School of Physical Sciences and Engineering, Australian National University, Canberra ACT 0200

This talk will discuss recent developments in the fields of nonlinear photonics, metamaterials, and Bose-Einstein condensates unified by the general concepts and ideas coming from the nonlinear physics of periodic structures. This will include the examples of unusual linear and nonlinearity-tunable transmission, periodic systems with negative refraction, Bragg solitons, vortices in Bloch states and gap vortices, etc.