

## SOLITONS AND NONLINEAR WAVES IN PERIODIC COMPLEX STRUCTURES (SYSN)

gemeinsam veranstaltet von den Fachverbänden  
Quantenoptik und Photonik (Q) und  
Dynamik und statistische Physik (DY)

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Spatial structures like solitons and vortices appearing in nonlinear media are a key for the understanding of complex effects in physics and related fields in science. In recent years fully new experimental systems in optics and atomic physics (e.g. BEC) as well as new theoretical approaches led to a much deeper understanding of the underlying physics of nonlinear media in general. This paves the way towards a fascinating area of fundamental physics and important applications in future. The goal of this symposium is to bring together scientists from different areas, mainly nonlinear optics and quantum optics and to show up similarities and differences of nonlinear phenomena like solitons and vortices in these branches.

## ÜBERSICHT DER HAUPTVORTRÄGE UND FACHSITZUNGEN

(Hörsaal HU Audimax)

## Hauptvorträge

SYSN 1.1	Fr	14:00	(HU Audimax)	<b>Optical Fiber Solitons: Perturbations and Interactions</b> , <a href="#">Fedor Mitschke</a>
SYSN 1.2	Fr	14:30	(HU Audimax)	<b>Solitons and nonlinear waves in photonic lattices</b> , <a href="#">Mordechai Segev</a>
SYSN 1.3	Fr	15:00	(HU Audimax)	<b>Dissipative Optical Solitons</b> , <a href="#">Ulf Peschel</a>
SYSN 1.4	Fr	15:30	(HU Audimax)	<b>Nonlinear lattice breathers and solitons: concepts and applications</b> , <a href="#">Sergej Flach</a>
SYSN 2.1	Fr	16:30	(HU Audimax)	<b>Bose-Einstein Condensates in fast rotation</b> , <a href="#">Jean Dalibard</a>
SYSN 2.2	Fr	17:00	(HU Audimax)	<b>Matter Wave Soliton Train from a Bose-Einstein Condensate</b> , <a href="#">Randall G. Hulet</a>
SYSN 2.3	Fr	17:30	(HU Audimax)	<b>Towards controlling matter wave lattice solitons</b> , <a href="#">Anna Sanpera</a>
SYSN 2.4	Fr	18:00	(HU Audimax)	<b>Non-spreading wave packets of interacting matter waves: Gap-Solitons and nonlinear self trapping</b> , <a href="#">Markus Oberthaler</a>

## Fachsitzungen

SYSN 1	<b>SYSN I</b>	Fr 14:00–16:00	HU Audimax	SYSN 1.1–1.4
SYSN 2	<b>SYSN II</b>	Fr 16:30–18:30	HU Audimax	SYSN 2.1–2.4