International Workshop: Waves, Solitons and Turbulence in Optical Systems

October 12 - 14, 2015

Weierstrass Institute
for Applied Analysis and Stochastics
Mohrenstrasse 39
10117 Berlin

Organizers

S. Amiranashvili (WIAS Berlin)
U. Bandelow (WIAS Berlin)
A. Vladimirov (WIAS Berlin)
M. Wolfrum (WIAS Berlin)

Program

Lectures are scheduled from Monday morning until Wednesday afternoon. Apart from the invited talks, there will be a limited number of contributed talks and a poster session.
Deadline for submission of abstracts: August 31, 2015.

Conference Fee

The conference fee of 75 € (Early Bird) or 100 € (after September 14) covers break refreshments, the conference dinner, and a booklet of abstracts.

Contact and Registration

wastos15@wias-berlin.de
www.wias-berlin.de/workshops/wastos15

Optical and optoelectronic systems display a huge variety of complex nonlinear dynamical regimes in space and time. Both in the Hamiltonian and in the dissipative context, one can observe regular dynamics such as waves, pulsations, or solitons, but also high-dimensional irregular dynamics where a large number of modes is excited and no reduction to a low-dimensional description is possible. The workshop is aiming to discuss recent results on experimental findings and theoretical background of such dynamical phenomena, explaining their origin, their properties, and transitions between them.
This includes in particular

- solitons, rogue waves, and supercontinua
- spatio-temporal dynamics in active and passive cavities
- effects of delay and control
- optical wave turbulence, onset of turbulence

Invited Speakers

- N. Akhmediev, Canberra
- S. Barland, Nice
- M. Guidici, Nice
- S. Gurevich, Münster
- N. Hoffmann, Hamburg
- G. Huyet, Cork *
- J. Javaloyes, Palma
- L. Larger, Besançon
- A. Picozzi, Dijon
- M. Tlidi, Bruxelles
- E. Tobisch, Linz
- S. Turitsyn, Aston

* to be confirmed

Support

Research Center MATHEON
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