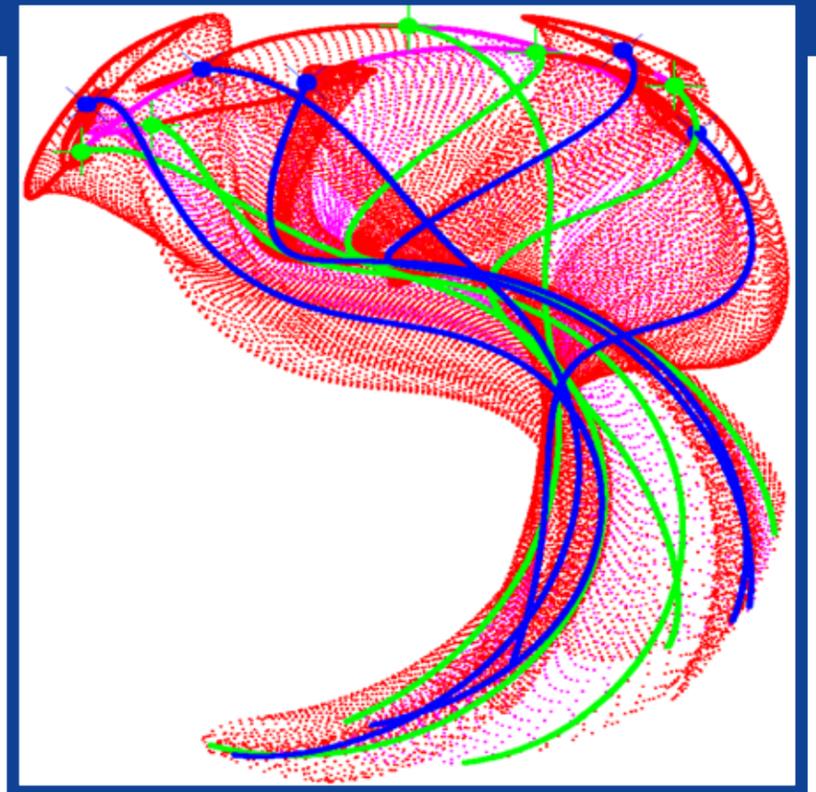




# Pattern Dynamics in Nonlinear Optical Cavities

## International Workshop 15 - 19 August 2016

The workshop will bring together leading experimentalists, theoretical physicists and applied mathematicians to foster an improved understanding of fundamental processes and complex phenomena in lasers and more general optical cavities. This in turn is expected to lead to smaller, faster and more energy-efficient optical devices that are capable of generating signals, storing them and even processing them.



### Topics

- Optical extreme events and rogue waves
- Spatial cavity solitons
- Temporal cavity solitons
- Optical cavities subject to delay
- Ring and fibre lasers
- Nonlinear dynamics in coupled laser networks
- Frequency combs, optical clocks, and precision measurements
- Spontaneous symmetry breaking and pattern formation
- Random lasers and Anderson localisation
- Noise effects in mode-locked lasers
- Acousto-optic interactions in micro-cavities
- Few photon effects - towards the quantum limit

### Invited speakers:

Thorsten Ackemann (UK)  
 Nail Akhmediev (AU)  
 Andreas Amann (IE)  
 Uwe Bandelow (DE)  
 Sylvain Barbay (FR)  
 Stéphane Barland (FR)  
 Stefan Breuer (DE)  
 Marcel G. Clerc (CL)  
 Cornelia Denz (DE)  
 Miro Erkintalo (NZ)  
 Ingo Fischer (ES)  
 Regine Frank (US)  
 Goëry Genty (FI)  
 Alejandro Giacomotti (FR)  
 Peter Grassberger (CA)  
 Tatiana Habruseva (IE)  
 Julien Javaloyes (ES)  
 Bryan Kelleher (IE)  
 Laurent Larger (FR)

Cristina Masoller (ES)  
 Stephan Reitzenstein (DE)  
 Eckehard Schöll (DE)  
 Marc Sciamanna (FR)  
 Moti Segev (IL)  
 Jorge Tredicce (AR)  
 Andrei G. Vladimirov (DE)  
 Sebastian Wieczorek (IE)  
 Frank Wise (US)

### Scientific coordinators:

Neil Broderick  
 Auckland, New Zealand  
 Bernd Krauskopf  
 Auckland, New Zealand  
 Kathy Lüdge  
 Berlin, Germany

### Organisation:

Katrin Lantsch  
 MPIPKS Dresden

Applications received before 15 May 2016 are considered preferentially.

Applications are welcome and should be made by using the application form on the event's web page. The number of attendees is limited. The registration fee for the international workshop is 120 Euro and should be paid by all participants. Costs for accommodation and meals will be covered by the Max Planck Institute. Limited funding is available to partially cover travel expenses. Please note that childcare is available upon request.

### For further information please contact:

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