



# Synthetic Non-Hermitian Photonic Structures: Recent Results and Future Challenges

## International Workshop 13 - 17 August 2018

The emerging field of non-Hermitian photonics promises a revolution in controlling light generation, flow and trapping in ways that were considered impossible in the past. Yet several aspects of non-Hermitian optical systems remain unexplored. This workshop aims at discussing the latest developments in the field as well as future directions and challenges.



### Topics:

- Non-Hermitian photonics
- Parity-time reversal symmetry
- Exceptional points
- Topological effects
- Supersymmetry
- Nonlinear interactions
- Unidirectional invisibility
- Microlasers
- Optical sensors

### Invited speakers:

A. Branczyk (CA)  
 K. Busch (DE)  
 P. Chen (US)  
 D. Christodoulides (US)  
 H. Deng (US)  
 F. Ellis (US)  
 L. Feng (US)  
 L. Ge (US)  
 E.M. Graefe (UK)  
 M. Heinrich (DE)  
 M. Hentschel (DE)  
 M. Khajavikhan (US)  
 D. Krizhanovskii (UK)  
 U. Kuhl (FR)  
 N. Litchinitser (US)  
 K.G. Makris (GR)  
 F. Nori (JP)  
 S. Ozdemir (US)  
 U. Peschel (DE)  
 P. Rabl (AT)  
 S. Rotter (AT)

M. Segev (IL)  
 B. Shapiro (IL)  
 J. Sipe (CA)  
 S. Song (KR)  
 A. Sukhorukov (AU)  
 A. Szameit (DE)  
 J. Wiersig (DE)  
 L. Yang (US)

### Scientific coordinators:

Alexander Eisfeld  
 Dresden, DE  
 Ramy El-Ganainy  
 Houghton, US  
 Tsampikos Kottos  
 Middletown, US  
 Henning Schomerus  
 Lancaster, UK

### Organisation:

Maria Voigt  
 MPIPKS Dresden

Applications received before 15 April 2018 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.

### For further information please contact:

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