Current Trends in Open and Nonequilibrium Quantum Optical Systems

Workshop / July 16-18, 2018

Organizers: Carlos Navarrete-Benlloch
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Quantum optics deals with systems out of equilibrium that exchange energy and information with their environments. The significant theoretical and experimental achievements of the last decades, together with the promise of revolutionary quantum technologies, have put this field in the spotlight. By now it comprises a broad collection of disciplines ranging from the most abstract to the most practical, gathering physicists, mathematicians, engineers, computer scientists, etc.

This workshop will bring together a representation of all the broad range of disciplines that synergistically make up modern quantum optics. The list of topics includes, but is not restricted to:

- Advances in theoretical tools and experimental platforms
- Applications to quantum technologies
- Many-body systems out of equilibrium and/or in the presence of dissipation
- Dissipative and dynamical phase transitions
- Topological phenomena and their extensions to open and nonequilibrium systems
- Low-dimensional, structured, and chiral environments
- Quantum thermodynamics
- Non-Markovian dynamics, feedback, and continuous monitoring of open systems

Speakers:

Monika Aidelsburger
Jan Carl Budich
Iacopo Carusotto
Johannes Fink
Alejandro González-Tudela
Simon Gröblacher
Markus Heyl
Zaki Leghtas
Johannes Majer
Anja Metelmann
Giovanna Morigi
Christine Muschik
Beatriz Olmos
Hannes Pichler
Tao Shi
Christine Silberhorn
Karolina Słowik
Andreas Wallraff

Talk submission deadline: Sunday, May 13.
Registration deadline: Friday, June 22.

More info at: **www.photons-and-matter.org/one-qos**

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