

# TOPOLOGICAL STATES OF LIGHT AND BEYOND

## WORKSHOP

### JUNE 20-24 2016

Topological properties play a fundamental role in many physical phenomena. The best known examples are quantum Hall systems, where conductance through edge states is insensitive to disorder. While the traditional research focus has been on electronic systems, there has been a recent emergence of great interest in exploring topological orders with photons. Several novel and intriguing theoretical schemes have been proposed to explore topological orders in photonic systems, both in the linear and strongly interacting regimes. This Workshop will focus on recent advances of innovative theoretical and experimental approaches to explore topologically nontrivial states.

#### Topics include:

- ▶ Topological photonic crystals
- ▶ Robustness against disorder
- ▶ Interacting and nonlinear topological systems
- ▶ Subwavelength topological edge states
- ▶ Quantum spin Hall effect of light

Applications for participation are welcome and should be made by filling the Application Form on the Workshop webpage. The deadline for applications is March 31 2016. Costs for accommodation and meals will be covered by PCS IBS. Limited funding is available to partially cover travel expenses.

For further information, please contact:  
Eun Sol Cho  
Visitors Program  
PCS IBS, Daejeon, Korea  
[pcs@ibs.re.kr](mailto:pcs@ibs.re.kr)  
<http://pcs.ibs.re.kr>

#### Invited Speakers

Konstantin Bliokh (Japan)  
Yidong Chong (Singapore)  
Andrew Greentree (Australia)  
Jung Hoon Han (South Korea)  
Ki-Seok Kim (South Korea)  
Kun Woo Kim (South Korea)  
Sungbin Lee (South Korea)  
Max Lein (Japan)  
Pilkyung Moon (China)  
Alexander Moroz ([wavescattering.com](http://wavescattering.com))  
Hossein Mousavi (USA)  
Kwon Park (South Korea)  
Alexander Poddubny (Russia)  
Mikael Rechtsman (USA)  
Moti Segev (Israel)  
Gennady Shvets (USA)  
Heungsun Sim (South Korea)  
Young-Woo Son (South Korea)  
Anton Souslov (Netherlands)  
Roman Suesstrunk (Switzerland)  
Bohm Jung Yang (South Korea)  
Xiang Zhang (USA)

#### Scientific Coordinators

Andrey Miroshnichenko (Australia)  
Alexander Khanikaev (USA)  
Hee Chul Park (South Korea)

#### Organization

Eun Sol Cho (PCS IBS)