



Workshop

Topological States of Light and Beyond

Program

Monday, June 20

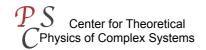
10:00 – 12:20	Registration
12:20 - 13:40	Lunch
13:40 - 13:50	Sergej Flach, PCS IBS
	Opening address
13:50 - 14:00	Andrey Miroshnichenko, Australian National University, Australia Opening address
14:00 – 14:40	Andrey Miroshnichenko, Australian National University, Australia What's so special about topology? (from a physicist's point of view) (lecture)
14:40 – 15:20	Konstantin Bliokh, CEMS RIKEN, Japan Spin-orbit interactions of light (lecture)
15:20 – 15:50	Coffee break
15:50 – 16:30	Alexander Khanikaev, City University of New York, USA Topologically nontrivial states of light and sound
16:30 – 17:10	Pilkyung Moon, New York University Shanghai, China Twisted Bilayer Graphene
17:10 – 18:00	Discussion break
18:00 – 20:00	Welcome reception





Tuesday, June 21

10:00 - 10:40	Kwon Park, KIAS, Korea
	Topological phases of matter: From quantum Hall effect to topological insulators to Weyl semimetals #1 (lecture)
10:40 - 11:10	Coffee break
11:10 - 11:50	Kwon Park, KIAS, Korea
	Topological phases of matter: From quantum Hall effect to topological insulators to Weyl semimetals #2 (lecture)
11:50 - 12:30	Ki-Seok Kim, POSTECH, Korea
	Dilute magnetic topological semiconductors
12:30 - 14:00	Lunch
14:00 - 14:40	Jung Hoon Han, Sungkyunkwan University, Korea
	Photoinduced Effects in Weyl Semimetals
14:40 - 15:20	Andrew Greentree, RMIT University, Australia
	From photon blockade to topological phase transitions of
	light: a (pre)-history of an exciting field
15:20 – 15:50	Coffee break
15:50 – 16:30	Yidong Chong, Nanyang Technological University, Singapore
	Anomalous Phases in Network Models and Photonic Lattices
16:30 - 16:50	Daniel Leykam,
	Nanyang Technological University, Singapore
	Edge Solitons in Nonlinear Photonic Topological Insulators
16:50 – 17:10	Dmitry Kuzmin, Chelyabinsk State University, Russia
	Non-reciprocity in cylindrical spiral graphene-based plasmonic waveguides
17:10 – 18:00	Discussion break
18:00 – 19:00	Dinner





Wednesday, June 22

10:00 - 10:40	Kwon Park, KIAS, Korea
	Weyl nodes as topological defects of the Wannier-Stark ladder: From surface to bulk Fermi arcs
10:40 - 11:10	Coffee break
11:10 – 11:50	Konstantin Bliokh, CEMS RIKEN, Japan Quantum spin Hall effect of light
11:50 – 12:30	Alexander Poddubny, ITMO University and loffe Institute, Russia Nonlinear topological phases of light
12:30 - 12:40	Workshop picture
12:40 - 14:00	Lunch
14:00 - 14:40	SungBin Lee, KAIST, Korea
	Space group fractionalization in two dimensional nonsymmorphic crystals
14:40 - 15:20	Roman Suesstrunk, ETH Zurich, Switzerland
	Helical edge states in a mechanical topological insulator
15:20 – 15:50	Coffee break
15:50 – 16:30	Jae Hoon Kim, Yonsei University, Korea
	Topological Phase Transitions in Topological Insulators Probed by Terahertz Light
16:30 – 17:10	Mehdi Biderang, APCTP, Korea
	Verification of spin Hall conductivity and topological phases in noncentrosymmetric superconductors
17:10 – 18:00	Discussion break
18:00 - 19:00	Dinner





Thursday, June 23

10:00 – 10:40	Wenjie Chen, Hong Kong University of Science and Technology, China Weyl points and topological notions in classical waves
10:40 - 11:10	Coffee break
11:10 – 11:50	Anton Souslov, Leiden University, Netherlands Topological acoustics and synthetic gauge fields in active liquids and mechanical metamaterials
11:50 – 12:30	Max Lein, Tohoku University, Japan Classification of Topological Insulators for Classical Light
12:30 - 13:30	Lunch
13:30 - 19:00	Excursion
19:00 – 21:00	Workshop banquet





Friday, June 24

10:00 - 10:40	Heung-Sun Sim, KAIST, Korea
	Topological Entanglement in 1D Topological Superconductor at Finite Temperature
10:40 - 11:10	Coffee break
11:10 - 11:50	Alexander Moroz
	Two level quantum optics models: geometric phases, supersymmetry, invariant spaces, orthogonal polynomials, and differential operators of Dunkl type
11:50 - 12:30	Kun Woo Kim, KIAS, Korea
	Bulk photovoltaic effect in Dirac surface states and Weyl semimetal
12:30 - 14:00	Lunch
14:00 - 14:20	Ivan Savenko, PCS IBS
	Energy relaxation of exciton polaritons in periodic potentials
14:20 - 14:40	Hyoung In Lee, Seoul National University, Korea
	Light spins of two-dimensional electromagnetic waves
14:40 – 15:00	Andrey Miroshnichenko, Australian National University, Australia
	Closing remarks
15:00 – 15:30	Coffee break
15:30 – 18:00	Discussions
18:00 – 19:00	Dinner