

Monday, May 20

- 09:50 – 10:40 **Registration & Poster session preparation**
- 10:40 – 11:10 Sergej Flach, PCS IBS
& scientific coordinators
Opening address
- 11:20 – 11:50 Alexander Tartakovskii, University of Sheffield, UK
*Resonantly hybridized excitons in moiré superlattices
in van der Waals heterostructures*
- 12:00 – 13:00 **Lunch**
- 13:30 – 14:00 Yong-Hoon Cho, KAIST, Korea
*Room-temperature quantum photonics
based on wide-bandgap semiconductor nanostructures*
- 14:10 – 14:40 Vadim Kovalev, Inst. of Semicond. Physics, SB RAS, Russia
Photoinduced transport in a Bose-Einstein condensate
- 14:50 – 15:10 Barbara Piętko, University of Warsaw, Poland
*Valley polarization of exciton-polaritons in monolayer WSe₂
in a tunable microcavity*
- 15:20 – 15:50 **Coffee break**
- 15:50 – 16:20 Michał Matuszewski, Institute of Physics, PAS, Poland
*Neuromorphic computing
in Ginzburg-Landau lattice systems*
- 16:30 – 17:00 Xavier Marie, INSA Toulouse, France
*Exciton and spin/valley dynamics
in transition metal dichalcogenide monolayers*
- 17:10 – 17:40 Dmitry Krizhanovskii, University of Sheffield, UK
*Nonlinear exciton- and trion-polaritons
in a monolayer semiconductor*
- 18:00 – 19:30 **Welcome reception**

Tuesday, May 21

- 09:30 – 10:00 Luis Viña, Autonomous University of Madrid, Spain
Polariton 1D directional couplers
- 10:10 – 10:40 Coffee break
- 10:40 – 11:10 Ivan Shelykh, University of Iceland, Iceland
*Theory of optical nonlinearities in TMD materials
in strong coupling regime*
- 11:20 – 11:50 Christian Schneider, University of Würzburg, Germany
*Strong light-matter coupling
with transition metal dichalcogenide monolayers*
- 12:00 – 13:00 Lunch
- 13:10 – 13:30 Workshop picture
- 13:30 – 14:00 Tony Heinz, Stanford University, USA
*Probing and controlling excitons
in 2D semiconductors and heterostructures*
- 14:10 – 14:40 Ivan Iorsh, ITMO University, Russia
*Non-inverse dynamics of a quantum emitter
coupled to an anisotropic metasurface*
- 14:50 – 15:10 Meng Sun, PCS IBS
*Bogolon-mediated electron scattering
in graphene in hybrid Bose-Fermi systems*
- 15:20 – 15:50 Coffee break
- 15:50 – 17:00 Poster session
- 17:00 – 18:00 Georgy Shlyapnikov, LPTMS CNRS & Univ. Paris-S., France
Colloquium Quantum gases in disorder
- 18:00 – 19:30 Colloquium dinner

Wednesday, May 22

- 09:30 – 10:00 Alexey Chernikov, University of Regensburg, Germany
Dielectric disorder in 2D semiconductors
- 10:10 – 10:40 Coffee break
- 10:40 – 11:10 Tatiana Shubina, Ioffe Institute, RAS, Russia
*Optical properties
of tubular and planar chalcogenide nanostructures*
- 11:20 – 11:50 Leonid Golub, Ioffe Institute, RAS, Russia
Valley and electric photocurrents in Weyl semimetals
- 12:00 – 13:00 Lunch
- 13:15 – 18:30 Excursion
Magoksa (마곡사) temple area
Gongsanseong (공산성) fortress area
Gongju (공주) museum
Gongju (공주) traditional hanok village
- 18:30 – 20:00 Workshop banquet

Thursday, May 23

- 09:30 – 10:00 Oleg Kibis, Novosibirsk State Technical University, Russia
*Optical control of electronic properties
of two-dimensional materials*
- 10:10 – 10:40 Coffee break
- 10:40 – 11:10 Tobias Korn, Rostock University, Germany
*Interlayer excitons
in twist-controlled van der Waals heterostructures*
- 11:20 – 11:50 Timothy Liew, Nanyang Technological University, Singapore
*Cellular automata and quantum neural networks
based on exciton-polaritons*
- 12:00 – 13:00 Lunch
- 13:30 – 14:00 Dmitri Solnyshkov, Institut Pascal, France
Polariton analogs of transitional metal dichalcogenides
- 14:10 – 14:40 Alexey Yulin, ITMO University, Russia
*Resonant phonon-polariton interactions and the formation
of complex vortex states in polariton condensates*
- 14:50 – 15:10 Hyoungh In Lee, Seoul National University, Korea
*The light spin and the breakdown of the electromagnetic
Poynting vector into its orbital and spin parts in surface
phonon polaritons for silicon carbide*
- 15:20 – 15:50 Coffee break
- 15:50 – 16:20 Hyounghsoon Choi, KAIST, Korea
*Transfer of light's orbital angular momentum
onto a nonresonantly excited polariton superfluid*
- 16:30 – 17:00 Sergey Tarasenko, Ioffe Institute, RAS, Russia
Edge photocurrents in 2D systems with non-trivial topology
- 17:10 – 17:40 Marina Semina, Ioffe Institute, RAS, Russia
Rydberg excitons in two-dimensional and bulk semiconductors
- 17:50 – 18:50 Dinner

Friday, May 24

- 09:30 – 10:00 Guillaume Cassabois, Univ. of Montpellier, CNRS, France
*Deep UV emission in hexagonal boron nitride:
from bulk to few-layer samples*
- 10:10 – 10:40 Coffee break & Poster removal
- 10:40 – 11:00 Seungjun Lee, Kyung Hee University, Korea
*Rashba type spin-layer locking in two-dimensional $X_2\text{Bi}_2$
($X = \text{Si}, \text{Ge}, \text{or Sn}$)*
- 11:10 – 11:40 Wang-Kong Tse, University of Alabama, USA
*Interlayer transport and interaction effects
in van der Waals solids*
- 11:50 – 12:00 Closing remarks
- 12:00 – 13:00 Lunch
- 13:00 – 13:30 Discussions