Program of PLMCN2026

Sunday, April 12th: Registration & Welcome Cocktail

18.00 Quantum College

Open of the Conference

Monday, April 13th

Session 1. 09:30-10:05. **Quantum Optics of Excitons and Polaritons**. Chairman: Alexey Kavokin

Time	Duration	Speaker & Title
09:30	10’	Opening Speech: Alexey Kavokin, Valentyn Volkov, Aldo Di Carlo
09:40	20’+5’	HOEFLING SVEN: Observation of 2D Kardar-Parisi-Zhang universal scaling
10:05	20’+5’	LAUSSY FABRICE: Quantum vs Quantum Optical Coherence of Polaritons

Coffee Break: 10:30-11:00

Session 2. 11:00-12:35. **Quantum Optics of Excitons and Polaritons**. Chairman: Alexey Kavokin

Time	Duration	Speaker & Title
11:00	20’+5’	SAVVAS GERMANIS: Chiral Light–Matter Coupling and Directional Emission in Glide-Plane Photonic Crystal Waveguides
11:25	20’+5’	AKOPIAN NIKA: Multi-Quantum-Dot Systems Nanowires
11:50	15’+5’	GALIMOV AIDAR: Optically Induced Coulomb Blockade for an Efficient Single-Photon Emission
12:10	20’+5’	VOLKOV VALENTYN: Van der Waals Materials for Advanced Nanophotonics: Perspectives and Challenges

12:35 – 14:00 Lunch

Session 3. 14:00-15:35. **Excitons & Exciton Polaritons in TMDs & Excitons and Electrons in 2D system** Chairman : Hoefling Sven

Time	Duration	Speaker & Title
14:00	20’+5’	BELYKH VASILII: Ultralong Spin Lifetimes of Optically Oriented Electrons and Holes in Perovskite Semiconductors
14:25	20’+5’	KAVOKIN ALEXEI: Enigma of Polariton Simulators
14:50	20’+5’	SABA MICHELE: Polaritons without excitons: the mechanism of lasing in lead halide perovskites
15:15	20’+5’	KAVOKINA STELLA: Semiconductor–Semimetal Transition in van der Waals Carbyne Crystals

Coffee Break: 15:40-16:00

Session 4. 16:00-17:35. Perovskite - PhV & Molecular Sensors Chairman: Portnoi Mikhail

Time	Duration	Speaker & Title
16:00	20’+5’	DI CARLO ALDO: Toward Epitaxial Growth of Halide Perovskite
16:25	20’+5’	REALE ANDREA: Scaling up of organic semiconductor nanocomposites for low-temperature-grade energy harvesting: from cell to module
16:50	20’+5’	SARANIN DANILA: Perovskite solar modules and panels with advanced surface modification for enhanced power output in ambient conditions
17:15	15’+5’	MINNEKHANOV ANTON: Natural Hyperbolic MoOCl2 for Anisotropic Raman Enhancement and Molecular Sensing

17:35	10 min pitch (3 min each) + 30' poster presentation	**Poster Session** BULAVIN ANDREI: Theory for quantum coherence in semiconductor microcavities MOROZOV ANDREY: Improvement of the perovskite photodiodes performance via advanced interface engineering with polymer dielectric SHIMING ZHENG: Simulation of exciton-exciton interactions in quantum wells under an electric field. MUROD BAHOVADINOV: Delocalization in 1D Anderson model with long range happings

Tuesday, April 14th

Session A1: 09:30-10:20. **Dissipative Coupling and Polariton Condensation.** Chairmen: Toropov Alexey

Time	Duration	Speaker & Title
09:30	20'+5'	BASTARRACHEA MIGUEL Dissipative coupling and non-Hermitian effects in polaron-polaritons.
09:55	20'+5'	ALYATKIN SERGEY Synchronization of polariton condensates in aperiodic Penrose tiling

Coffee Break: 10:20-10:50

Session A2:10:50-12:25. **Quantum Dots & Quantum Light Sources - THz & Sensors** Chairman: Laussy Fabrice

Time	Duration	Speaker & Title
10:50	20'+5'	SHUBINA TATIANA: Coherent superposition of resonantly scattered and emitted single photons from a two-level system
11:15	20'+5'	TOROPOV ALEKSEI : Telecom C-band single-photon sources based on a semiconductor-dielectric microcavity with a single quantum dot
11:40	20'+5'	PORTNOI MIKHAIL: Optical properties and THz applications of nanocarbons
12:05	15'+5'	MASLOVA VALERIA: Low-power topological darkness sensors based on anisotropic reflection

12:25 – 14:00 Lunch

Session A3: 14:00-15:35. **Quantum Optics: State of light - 2D Materials - Nano & Micro Cavities.** Chairman: Shubina Tatiana

Time	Duration	Speaker & Title
14:00	20'+5'	BAHROVA OLHA: Canalized polariton propagation and non-abelian gauge field focusing in perovskite microcavities
14:25	20'+5'	WEITZ MARTIN: Chilling photons in variable potentials: From a two-state system of light to quantum rings
14:50	15'+5'	ERMOLAEV GEORGY: Giant optical anisotropy in van der Waals materials: from magnetic excitons to hyperbolic materials
15:10	15'+5'	EGOROV OLEG : Modeling of phonon-mediated relaxation dynamics towards polariton lasing in microcavity with an arbitrary 2D potential landscape Title of the talk ORAL

Coffee Break: 15:30-16:00

Session4. 16:00-17:15. **Quantum Optics New Materials and Advanced Applications Physics** Chairman: Di Carlo Aldo

Time	Duration	Speaker & Title
16:00	20'+5'	BARETTIN DANIELE : When Nanowires Go Wurtzite: Direct Gaps and Near-Crossover Physics in AlGaAs
16:25	15'+5'	IVANOVA VALERIIA: Optical control of nonlinear Hall photocurrents with account

		of skew scattering in 2D valley semiconductors in the vicinity of a cyclotron resonance
16:45	15'+5'	OSIPOV ALEKSEI: Flat bands in a chain of coupled laser dimers
17:10	20'+5'	ERAMO GIUSEPPE Smart Ports and Safe Borders: The Economic and Environmental Impact of Muon-Based Inspection
		CONCLUSION & Announcement of PLMCN 2027

19:30 SOCIAL DINNER *YEREVAN TEVERN* 48A ADMIRAL ISAKOV AVE,

Wednesday, April 15th – Session B

10:00-19-00 EXCURSION Oshakan Village (Pick up & Drop off from Quantum College)