

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
08:30		Registration				
08:45		Welcome				
		Quantum states and cavity QED Chair: A. Kavokin	2D and novel materials I Chair: M. Portnoi	THz and Intersubband transitions Chair: A. Imamoglu	THz and plasmonic systems Chair: A. Tredicucci	Topological polaritons Chair: T. Liew
09:00		P. Rabl Non-perturbative Cavity QED	J. Finley Trapping excitons in monolayers and heterostructures of atomically-thin semiconductors	C. Lange Subcycle control of spins and photons by nanoresonator near-fields	J. Faist Engineering vacuum fields with metamaterials	S. Hofling Topological polaritons
09:45		C. Sanchez Munoz Multi-mode Quantum Rabi Model and Superluminal Signaling	V. Menon Control of light-matter interaction in 2D materials	S. De Liberato Cavity-mediated bound excitons	A. Fernandez-Dominguez Plasmon-Exciton Coupling: Light-forbidden Transitions and Quasichiral Interactions	P. St Jean Topological photonics with exciton-polaritons
10:15		J. C. Lopez Carreno Watching Photons	T. Smolenski Shubnikov-de Haas oscillations in optical conductivity of monolayer MoSe2	G. Scalari Broadband operation and RF control of THz QCL frequency combs	C. Ciraci Impact of electron spill-out on Rabi splitting in plasmonic systems	L. Peticup Probing polariton band structures in optically imprinted potential landscapes
10:30		O. S. Ojambati Quantum electrodynamics at room temperature: coupling a single vibrating molecule with a plasmonic nanocavity	S. Borghardt Radially polarized light beams from spin-helical dark excitons in monolayer WS2	M. Montanari n-type Ge/SiGe Multi-Quantum-Well for a THz Quantum Cascade Laser	S. D. Ganichev Terahertz ratchet effects in graphene and semiconductor nanostructures with a lateral superlattice	O. Jamadi Observation of photonic Landau levels in strained honeycomb lattices
10:45		E. Zubizarreta Casalena Conventional and unconventional photon statistics	A. A. Mitoglu Magneto-optical investigation of valley coherence in monolayer dichalcogenides	M. Jeannin Ultra-Small Mode Volume Three-Dimensional THz LC Circuits for Intersubband Polaritons	M. Otte Signalizing photoconductivity and magnetoresistance oscillations (MRO) induced by terahertz radiation in HgTe quantum wells	A. Gianfrate Direct measurement of the quantum geometric tensor in a two-dimensional continuous medium
11:00		Coffee Break	Coffee Break	Coffee Break	Coffee Break	Coffee Break
		Polariton Quantum fluids I Chair: N. Berloff	2D and novel materials II Chair: Q. Xiong	Polariton Quantum fluids II Chair: S. Kéna-Cohen	Metamaterials Chair: M. Atature	Plasmonic systems and nanostructures Chair: G. Scalari
11:30		M. Richard Dispersion relation of the collective excitations in a resonantly driven quantum fluid of polaritons	M. Lorenzon Long-range FRET-mediated exciton diffusion in cesium lead halide perovskite nanostructures	P. Walker Nonlinear Optics with Exciton-Polaritons in High Velocity Waveguides	H. S. Nguyen Tailoring on-demand dispersion with symmetry breaking: from flatband to Dirac cones and multivalley dispersions	B. de Nijs Light on the Angstrom Scale
12:00		M. Pieczarka Quantum depletion of a nonequilibrium exciton-polariton condensate	D. Reiter Dynamical theory for controlled optical nonlinearities of monolayers of transition metal dichalcogenides	G. Lerario Hydrodynamics of vortices, breathing dark solitons and lasing domain walls in a polariton condensate	V. Caligiuri A semi-classic description of Epsilon-Near-Zero resonances in Metal/Insulator nano-cavities	R. Mermet-Lyaudoz Experimental observations of bound states in the continuum at anti-crossing point induced by symmetry breaking
12:15		H. Sigurdsson Tuning light-matter lasers of microscopically coupled exciton polariton condensates	C. Kasl Effects of Defects on Band Structure and Excitons in WS2 Revealed by Nanoscale Photoluminescence Spectroscopy	M. Gromovoy Polariton condensates in ZnO waveguides: towards integrated polaritonics	A. Calabrese THz detectors based on optomechanical metamaterials	M. Abbarchi Solid-state dewetting of Si(Ge)-based complex nano-architectures and their applications in photonics
12:30		N. Voronova Precision engineering paves the way to direct exciton Bose-Einstein condensation	A. Genco Moving from momentum-indirect to interlayer excitons in van der Waals heterobilayers based on transition metal dichalcogenide alloys	A. Maitre Imprinting solitons on a polariton superfluid	Elevator Pitch	S. Raiabali The Effect of the Narrow Gap Split Ring Resonators on the Polariton Spectrum in the Ultrastrong Coupling Regime
12:45		D. Suarez Forero Wave-particle duality of single polaritons	M. Portnoi Momentum alignment of photoexcited carriers in low-dimensional Dirac materials	M. Matuszewski Neuromorphic computing in Grinzburg-Landau polariton lattice systems		M. Pilo Pais DNA Self-Assembled Nanoantennas
13:00		Lunch	L. Maserati Theoretical and Experimental Observation of Anisotropic 2D Excitons in Self-Assembled Hybrid Quantum Wells	Lunch		Best poster award and concluding remarks
		Interactions in polariton fluids and cuprate excitons Chair: F. Laussy				End of program
14:15		R. Rapaport Strong repulsive and attractive interactions in correlated quantum fluids of dipolar excitons and polaritons				
14:45		T. Chervy Electron-polariton interactions in the fractional quantum Hall regime				
15:00		I. Chestnov Pseudo-drag of a polariton superfluid by an electric current				
15:15		D. Ziemkiewicz High power, Q-switching master based on Rydberg excitons in Cu2O				
15:30		S. Zielinska Magneto-optical properties of excitons in Cu2O for weak and intermediate magnetic fields				
15:45		Coffee Break				
		Optical Control in nanostructures Chair: M. Abbarchi				
16:15		K. Kavokin Optical cooling of nuclear spins in semiconductor microcavities				
16:45		A. Poddubny Optomechanical Kerker effect for trembling nanoparticles and membranes				
17:15		S. Gavrilov Spin networks and supersolid states of cavity polaritons under resonant driving				
17:30		K. Lekenta Liquid crystal microcavity as a new building block for the next-generation of spin Hall based devices				
17:45		N. Karpowicz Electro-optic imaging in the near infrared				
18:00	Welcome					
18:30		Light Dinner at Fondazione Palmieri	Light Dinner at Arcidiocesi di Lecce			
		General public Talks (in Italian) M. Inguscio C. Vozzi Chair: J. Finley				General public Talks (in Italian) A. Kavokin C. Toninelli Chair: S. Hofling
20:00		Banquet	A. Imamoglu Many-body optical excitations in solid state systems			N. Berloff Polaritonic network as a paradigm for dynamics of coupled oscillators
20:45			A. Tredicucci Optomechanics in active and chiral systems			M. Atature Optical control of nuclear spins: from nuisance to resource
21:15			Q. Xiong Room-temperature strong light-matter coupling and polariton condensation in perovskite materials			R. J. Warburton A quantum dot exciton deep in the strong coupling regime of cavity-QED
21:45			T. Liew Cellular automata and quantum neural networks based on exciton-polariton lattices			S. Kéna-Cohen Dynamics of carriers, excitons and polaritons in novel materials



Castello Carlo V



Roman Theater



Arcidiocesi di Lecce

General public Talks at the Roman Theater

- 28/5 19:00 - 20:00 M. Inguscio: "Scienza per il futuro"
C. Vozzi: "Meccanica quantistica: 'magia' senza trucco"
- 30/5 19:00 - 20:00 A. Kavokin: "Luce liquida"
C. Toninelli: "Oltre l'intuizione: la Scienza"