

The International Workshop on Functional and Nanostructured Materials
Georgian Technical University, 6-10 September 2016

PROGRAMME



	TUESDAY 6 September '16	WEDNESDAY 7 September '16	THURSDAY 8 September '16	FRIDAY 9 September '16	SATURDAY 10 September '16
09:15-09:30	OPENING			Guided Tour to Kakheti Wine Tasting & Lunch (9:00 – 20:00)	
09:30-10:00	A. Bramati	A. Tartakovskii	S. De Liberato		M.Silva
10:00-10:30	A. Kavokin	M. Potemski	I. Savenko		N. Gippius
10:30-11:00	H. Ohadi	G. Deligeorgis	C.Tejedor		B. Pietka
11:00-11:30	COFFEE BREAK				COFFEE BREAK
11:30-12:00	H. Flayac	N. Papasimakis	D. Lidzey		A.Nalitov
12:00-12:30	A. Askitopoulos	P. Lagoudakis	I. Samuel		N. Bobrovska
12:30-13:00	D. Krizhanovskii	C. Dietrich	M. Antognazza		A.Trifonov
13:00-13:30					S. Kutrovskaya
13:00-14:30	LUNCH				13:30 CLOSING REMARKS
14:30-15:00	L. Vina	N. Healy	M. Matuszewski		Departure 13:45
15:00-15:30	J. Schmitt	S. Mailis	V.Apostolopoulos		
15:30-16:00	F. Laussy	O. Kibis	T. Liew		
16:00-16:30	COFFEE BREAK				
16:30-16:45	C. Schneider	Guided Tour to Mtskheta & Dinner (16:30 - 21:30)	J. Szczytko		
16:45-17:00			L.Carreno		
17:00-17:15	O. Kyriienko		M. Sun		
17:15-17:30			E.Khutsishvili		
17:30-17:45			N. Kekelidze		
18:30	Tbilisi City Guided Tour (18:30 – 19:45)			Hybrid Photonics Project Meeting (18:00) &Dinner (20:00)	
20:00	Welcome Dinner (20:00- 23:00)				

1st Day of FNM 2016 - TUESDAY, 6 September '16

08:10 - 08:30	Bus collection from hotels: first stop at Europe Square near Metekhi Church (hotel "GTM"); second stop at Freedom Square (hotel "Marlyn")			
08:45 - 09:00	Arrival to Georgian Technical University, registration			
09:15 - 09:30	FNM 2016 Official Opening	Prof Archil Prangishvili	Rector of Georgian Technical University	
		Prof Alexey Kavokin	University of Southampton, UK	
		Prof Pavlos Savvidis	University of Crete & FORTH, Greece	
	Presentation Title	Presenter	Affiliation	Chair
09:30 - 10:00	Lattices of quantized vortices in polariton superfluids	Prof Alberto Bramati	UPMC-Laboratoire Kastler Brossel, France	P. Savvidis
10:00 - 10:30	New quantum effect in a two-dimensional electron gas	Prof Alexey Kavokin	University of Southampton, UK	
10:30 - 11:00	Spin switches and spin lattices with optically trapped exciton-polariton condensates	Dr Hamid Ohadi	University of Cambridge, UK	
11:00 - 11:30	COFFEE BREAK			
11:30 - 12:00	Single photon sources based on weakly nonlinear systems	Dr Hugo Flayac	EPFL, Switzerland	A. Kavokin
12:00 - 12:30	Intrinsic Josephson coupling and non-resonant spin switching in an optically trapped polariton condensate	Dr Alexis Askitopoulos	University of Southampton, UK	
12:30 - 13:00	Spontaneous nonlinear polariton patterns in a semiconductor microcavity	Prof Dmitry Krizhanovskii	University of Sheffield, UK	
13:00 - 14:30	LUNCH			
14:30 - 15:00	Spin textures and gates in quasi-one-dimensional polariton condensates	Prof Luis Vina	Universidad Autonoma de Madrid, Spain	A. Bramati
15:00 - 15:30	Calorimetry and Coherence of a photon Bose-Einstein condensate in a dye microcavity	Dr Julian Schmitt	University of Bonn, IAP, Germany	
15:30 - 16:00	Nontrivial physics with noninteracting polaritons	Dr Fabrice Laussy	Universidad Autonoma de Madrid, Spain	
16:00 - 16:30	COFFEE BREAK			
16:30 - 17:00	Room temperature Tamm-Plasmon Exciton-Polaritons with a WSe ₂ monolayer	Dr Christian Schneider	University of Wurzburg, Germany	L. Vina
17:00 - 17:30	Quantum devices with exciton-polaritons	Dr Oleksandr Kyriienko	University of Copenhagen, Denmark	
17:30	Bus departure to hotels			
18:30	Collection from hotels for Tbilisi City Guided Tour, followed by FNM Welcome Dinner at Delicato Cafe, 9 Kipshidze street, Tbilisi			

2nd Day of FNM 2016 - WEDNESDAY, 7 September '16

08:30 - 08:50	Bus collection from hotels			
09:15	Arrival to Georgian Technical University			
	Presentation Title	Presenter	Affiliation	Chair
09:30 -10:00	Photonics and polaritonics with van der Waals heterostructures	Prof Alexander Tartakovskii	University of Sheffield, UK	P. Lagoudakis
10:00 -10:30	Optical properties of semiconducting 2D materials	Dr Marek Potemski	Laboratoire National des Champs Magnétiques Intenses, CNRS, France	
10:30 -11:00	TBC	Dr George Deligeorgis	University of Crete & FORTH, Greece	
11:00-11:30	COFFEE BREAK			
11:30 - 12:00	Cooperative effects in periodic and disordered metamaterial lattices	Dr Nikitas Papasimakis	University of Southampton, UK	A.Tartakovskii
12:00 - 12:30	Polariton lattices: a new platform for quantum simulators	Prof Pavlos Lagoudakis	University of Southampton, UK	
12:30 - 13:00	Polariton lasing from fluorescent proteins	Dr Christof Dietrich	University of Wurzburg, Germany	
13:00 - 14:30	LUNCH			
14:30 - 15:00	Functionalised optical fibres	Prof Noel Healy	Newcastle University, UK	N. Papasimakis
15:00 - 15:30	Laser processing of amorphous Silicon on lithium niobate for photonic applications	Dr Sakellaris Mailis	University of Southampton, UK	
15:30 - 16:00	Dressing electromagnetic field as a tool to control electronic properties of nanostructures	Prof Oleg Kibis	Novosibirsk State Technical University, Russia	
16:15 – 21:30	Guided Tour to Mtskheta & Dinner (16:15 - 21:30)			

3rd Day of FNM 2016 - THURSDAY, 8 September '16

3rd Day of FNM 2016 - THURSDAY, 8 September '16				
8:30 - 8:50	Bus collection from hotels			
9:15	Arrival to Georgian Technical University			
	Presentation Title	Presenter	Affiliation	Chair
09:30 - 10:00	Nonlinear nanophotonics with localized phonon polaritons	Dr Simone De Liberato	University of Southampton, UK	T. Liew
10:00 - 10:30	Theory for dissipative exciton-polariton condensates	Dr Ivan Savenko	Institute for Basic Science, South Korea	
10:30 - 11:00	Violation of classical inequalities in nanostructured systems	Prof Carlos Tejedor	Universidad Autonoma de Madrid, Spain	
11:00 -11:30	COFFEE BREAK			
11:30 - 12:00	Strong coupling in optical microcavities containing the fluorescent molecular dye BODIPY-Br	Prof David Lidzey	University of Sheffield, UK	S. De Liberato
12:00 - 12:30	Nanostructured organic and hybrid semiconductors	Prof Ifor Samuel	University of St Andrews, UK	
12:30 - 13:00	Controlling life with photons	Dr Maria Rosa Antognazza	Fondazione Istituto Italiano di Tecnologia, Italy	
13:00-14:30	LUNCH			
14:30 - 15:00	Instability of an exciton-polariton condensate	Prof Michal Matuszewski	Institute of Physics, Polish Academy of Sciences, Poland	C. Tejedor
15:00 - 15:30	THz emitters based on Schottky potentials and diffusion currents	Dr Vasilis Apostolopoulos	University of Southampton, UK	
15:30 - 16:00	Bunching in Bosonic Cascades	Prof Timothy Liew	Nanyang Technological University, Singapore	
16:00-16:30	COFFEE BREAK			
16:30 - 16:45	Exciton-polaritons in a strong terahertz field - doubly dressed bosons	Mr Jacek Szczytko	University of Warsaw, Poland	D. Lidzey
16:45 - 17:00	TBC	Mr J.C. Lopez Carreno	Universidad Autonoma de Madrid, Spain	
17:00 - 17:15	Staggered exciton-photon lattice driven by SAW	Mr Meng Sun	Institute for Basics Science, South Korea	
17:15 -17:30	Influence of Nanosize Clusters on the Optical Absorption near the Fundamental Egde in Indium Arsenide Crystals	Mrs Elza Khutsishvili	Tbilisi State University, Georgia	
17:30-17:45	Investigation of some Optical Properties of Functional for Photonics Semiconductor Compounds with Nanosize Clusters.	Prof Nodar Kekelidze	Tbilisi State University, Georgia	
	Transportation of delegates to hotels			

18:00 - 19:30	Hybrid Photonics Project Meeting (by invitation)
20:00	Hybrid Photonics Project Dinner (by invitation)

4th Day of FNM 2016 - FRIDAY, 9 September '16 - Day Tour to Kakheti

8:30 - 9:00	Collection from hotels and departure to Kakheti
Guided Tour of Kakheti, Visit to Nekresi and Grammy Monasteries, Wine Tasting & Lunch	
20:00	Return to hotels

5th Day of FNM 2016 - SATURDAY, 10 September '16

8:30 - 8:50	Bus collection from hotels			
9:15	Arrival to Georgian Technical University, registration			
	Presentation Title	Presenter	Affiliation	Chair
09:30 - 10:00	TBC	Mr Matteo Silva	University of Southampton, UK	M. Matuszewski
10:00 - 10:30	Theory of condensation of indirect excitons in a trap	Prof Nikolay Gippius	Skoltech Institute of Science and Technology, Russia	
10:30 - 11:00	Giant Zeeman effect and non-equilibrium exciton-polariton condensation in microcavities with semi-magnetic quantum wells.	Prof Barbara Pietka	University of Warsaw, Poland	
11:00-11:30	COFFEE BREAK			
11:30 - 12:00	Spontaneous polariton currents in periodic lateral chains	Dr Anton Nalitov	University of Southampton, UK	N. Gippius
12:00 - 12:30	Coupling to mechanical and reservoir modes in microcavity polaritons	Dr Nataliya Bobrovskaya	Institute of Physics, Polish Academy of Sciences, Poland	
12:30 - 13:00	Oscillations of the four-wave mixing signal of semiconductor heterostructures: quantum beats and Rabi oscillations	Mr Artur Trifonov	St Petersburg State University, Russia	
13:00 - 13:30	Optical properties of nanoparticles clusters	Dr Stella Kutrovskaya	Stoletovs' Vladimir State University, Russia	
13:30 - 13:45	Closing remarks and departure			