

9th optoelectronics and photonics winter school: integrated quantum photonics - IQP 2017

Folgaría

26/03-01/04/2017

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	26-Mar	27-Mar	28-Mar	29-Mar	30-Mar	31-Mar	1-Apr
Chairperson		Lorenzo Pavesi	Lorenzo Pavesi	Roberta Ramponi	Roberta Ramponi	Roberta Ramponi	Lorenzo Pavesi e Roberta Ramponi
9:00-10:00		I. Carusotto - Quantum Optics: from basic concepts to present challenges	D. Stoppa - Single-Photon CMOS Sensors for Quantum Technology Applications	M. Agio - Nanophotonics and electronics for bright single-photon sources based on color centers in diamond	M. Agio - Nanophotonics and electronics for bright single-photon sources based on color centers in diamond	G. Pucker - Introduction to silicon microfabrication technology in the context of silicon photonics and quantum optical circuits	M. Booth - 3D Dynamic Laser Processing for Photonic Circuits in Diamond, Glass and Other Materials
10:00-11:00		T. Calarco - Quantum information processing and quantum control	P. Walther - Photonic Quantum Simulation	P. Smith - Fabrication of silica on silicon and periodically poled nonlinear devices for quantum technologies	P. Smith - Fabrication of silica on silicon and periodically poled nonlinear devices for quantum technologies	G. Boso - Quantum key distribution	F. Kaiser - Quantum optical measurement methods for advanced determination of material properties
11:00-11:30		coffee	coffee	coffee	coffee	coffee	coffee
11:30-12:30		J. Matthews - Sub shot noise parameter estimation with single photons	J. Matthews - Sub shot noise parameter estimation with single photons	A. Fiore - Single-photon detectors for integrated quantum photonics	M. Liscidini - Generation of non-classical states of light via parametric fluorescence in integrated devices	F. Kaiser - Quantum optical measurement methods for advanced determination of material properties	G. Boso - Quantum key distribution
12:30-16:30		<i>lunch and free (ski-discussion) time</i>	<i>lunch and free time</i>	<i>lunch and free time</i>	<i>lunch and free time</i>	<i>lunch and free time</i>	<i>lunch and closing</i>
16:00-16:30	<i>Registration</i>	coffee	coffee	coffee	coffee	coffee	
Chairperson	Lorenzo Pavesi e Roberta	Roberta Ramponi	Roberta Ramponi	Lorenzo Pavesi	Lorenzo Pavesi	Lorenzo Pavesi	
16:30-17:30	I. Carusotto - Quantum Optics: from basic concepts to present challenges	I. Carusotto - Quantum Optics: from basic concepts to present challenges	F. Sciarrino - Boson Sampling with integrated photonics	M. Liscidini - Generation of non-classical states of light via parametric fluorescence in integrated devices	R. Ramponi - Femtosecond laser micromachining: an enabling tool for quantum technologies	M. Borghi - Design, simulation, and challenges in the realization of Silicon On Insulator quantum integrated circuits	
17:30-18:30	P. Walther - Photonic Quantum Technology	P. Walther - Advantages of Photonic Quantum Computing	J. Finley - Semiconductor Nanostructures for Quantum Information Technologies	J. Finley - Semiconductor Nanostructures for Quantum Information Technologies	G. Pucker - Introduction to silicon microfabrication technology in the context of silicon photonics and quantum optical circuits	M. Borghi - Design, simulation, and challenges in the realization of Silicon On Insulator quantum integrated circuits	
18:30-19:30	T. Calarco - Quantum information processing and quantum control	M. Liscidini - Generation of non-classical states of light via parametric fluorescence in integrated devices	A. Fiore - Single-photon detectors for integrated quantum photonics	F. Sciarrino - Boson Sampling with integrated photonics	M. Booth - 3D Dynamic Laser Processing for Photonic Circuits in Diamond, Glass and Other Materials	M. Borghi - Design, simulation, and challenges in the realization of Silicon On Insulator quantum integrated circuits	
19:30-21:00	dinner	dinner	dinner	dinner		dinner	
21:00-22:30	<i>Get together: photos, beer and grappa</i>	<i>evening lecture: Gerd Leuchs - From Maxwell's equations to quantum optics and particle physics</i>	<i>poster session with drinks</i>	<i>rump session: what is the killer application for IQP? (J. Matthews and J. Finley)</i>	<i>social dinner</i>	<i>rump session: what is the ideal technological platform? (F. Kaiser and G.Boso)</i>	