



## New ICFOnians

New researchers have joined ICFO.

October 17, 2011

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Four postdoctoral researchers, Dr. [Agustin Mihi](#), Dr. [Silke Diedenhofen](#), Dr. [Marko Spasenovic](#) and Dr. [Christine Muschick](#); three visiting scientists, Dr. [Sonja Buschow](#), Mr. [Michal Studzinski](#) and Mr. [Pankaj Joshi](#); five PhD students, Mr. [Miquel Rude](#), Ms. [Elsa Passaro](#), Mr. [David Tan So](#), Mr. [Olivier Tieleman](#) and Mr. [Adam Valles](#); and two undergraduate students, Mr. [Domenico Demasi](#) and Mr. [Thomas Koffel](#) have joined ICFO.

Dr. Agustin Mihi received his PhD in Physics from the University of Seville in July of 2008. That year he was awarded with a Beckman Institute Postdoctoral Fellowship at the University of Illinois at Urbana-Champaign, where he worked in Prof. P. V. Braun's group. He joins ICF as a research fellow at the Solution-processed nanophotonics group led by Prof. Gerasimo Konstantatos. His research is focused on increasing the light harvested in Thin Solar Cells by coupling Photonic structures.

Dr. Silke Diedenhofen obtained her PhD in Applied Physics at AMOLF in collaboration with Philips Research, both in the Netherlands. She joins ICFO as a postdoctoral researcher in the Solution-processed nanophotonic devices group of Prof. Gerasimos Konstantatos. She will investigate plasmonically enhanced quantum dot photodetectors.

Dr. Marko Spasenovic obtained her PhD in Applied Physics at AMOLF, the Netherlands. He joins ICFO in the group of Prof. Frank Koppens to work on graphene nano-optics, in particular extreme light concentration and manipulation with graphene-based nano-structures.

Dr. Christine Muschik obtained her PhD with Ignacio Cirac in the Max Planck Institute in Garching, Germany. She joins ICFO at the group of ICREA Prof. Maciej Lewenstein. She will work on the theory of atomic ensembles and spin polarization spectroscopy, and on other fundamental problems of atomic physics and quantum optics.

Dr. Sonja Buschow obtained her PhD in Biology at the University Medical Centre Utrecht, the Netherlands. She joins ICFO as research visitor in the group of ICREA Prof. Maria Garcia-Parajo, with an EMBO short term fellowship award. She will apply super resolution nanoscopy techniques to obtain information on how Galectin-9 scaffolds participate in the nanodomain organization and dynamics of pathogen recognition receptors, regulating phagocytic function of dendritic cells.

Mr. Michal Studzinski is a PhD student in the group of Prof. Horodecki in Gdansk, Poland. He will spend one year at ICFO as a visiting student in the group of ICREA Prof. Antonio Acin. His work will be on the generalization of depolarization techniques and t-designs to continuous-variable quantum systems.

Mr. Pankaj Joshi is a PhD student in the group of Prof. Horodecki in Gdansk, Poland. He will

spend six months at ICFO as a visiting student at the group of ICREA Prof. Antonio Acín. His work will be on self-testing protocols and, in particular, studying whether any amount of entanglement can be certified by means of Bell-type tests.

Mr. Miquel Rude graduated in industrial engineering from Universitat Politècnica de Catalunya. He joins the group of ICREA Prof. Valerio as a PhD student to work on nano-structured thin films.

Ms. Elsa Passaro graduated in Physics from the Università Federico II, Naples, Italy. He joins the Quantum Information theory group led by Prof. Antonio Acín as a PhD student. Her PhD topic will be on the use of entanglement and quantum non-locality as a resource for information protocols.

Mr. David Tan So graduated in Physics and Materials Science from the Ateneo de Manila University. In his Master's thesis, he investigated the synthesis of nano-iron-sulfur compounds and their application as absorber material in solar cells. He now joins the group of Prof. Gerasimos Konstantatos as a PhD student and will work on the development of nanomaterials based on high-abundance and nontoxic elements for use in photovoltaics.

Mr. Olivier Tieleman has started his PhD studies in Utrecht, but now joins the Quantum optics group led by Prof. Maciej Lewenstein to finalize them. He will be working on dynamically induced artificial gauge fields for fermions in optical lattices. The co-supervisor is Dr. Andre Eckardt, now at the University of Dresden.

Mr. Adam Valles is a recently graduated telecom engineer from Universitat Politècnica de Catalunya. He is joining the group of Prof. Juan P. Torres. His thesis research will be about generating efficient sources of paired photons to perform experiments that test the nature of quantum mechanics.

Mr. Domenico Demasi is a student in Telecommunication Engineering from Politecnico di Torino. He will be working at Prof. Pablo Loza-Alvarez's group towards the construction of a fiber bundle-based nonlinear microscope for biomedical applications.

Mr. Thomas Koffel is MSc-student in Physics at ENS Paris, France. He will spend one year at the group of Prof. Maciej Lewenstein as a "stagier". He will be working on development and applications of numerical methods of quantum many body systems.



Dr. Sonja Buschow, Mr. Michal Studzinski and Mr. Pankaj Joshi



Mr. Miquel Rude, Ms. Elsa Passaro and Mr. David Tan So



Mr. Olivier Tieleman and Mr. Adam Valles



Mr. Domenico Demasi and Mr. Thomas Koffel