

AtomQT workshop: “Quantum coherent effects with ultra-cold atoms”

organized by COST Action CA16221 “Quantum Technologies with Ultra-Cold Atoms”

Program **Thursday, August 29, 2019.**

13.30 - 14.00	Welcome and registration	
14.00 - 14.30	Naceur Gaaloul, Leibniz University Hannover, Germany	Engineered atomic states for precision interferometry
14.30 - 15.00	Stephanie Manz, Technical University of Wien, Austria	Trapped BEC interferometry
15.00 - 15.30	Coffee break	
15.30 - 16.00	Peter Domokos, Wigner Research Centre for Physics, Hungary	Microwave field sensing by a Bose-Einstein condensate of atoms
16.00 - 16.30	Wojciech Gawlik, Jagiellonian University, Poland	Diagnostic of cold-atom superposition states by Faraday rotation
16.30 - 17.00	Bruno Juliá-Díaz, University of Barcelona, Spain	Entanglement structure of the two-component Bose-Hubbard model as a quantum simulator of a Heisenberg chain

Program **Friday, August 30, 2019.**

9.30 - 10.00	Antun Balaž, Institute of Physics Belgrade, Serbia	Vortices and droplets in dipolar Bose-Einstein condensates
10.00 - 10.30	Peter Jeglič, Jožef Stefan Institute, Slovenia	Emission of correlated twin jets from a driven Bose-Einstein condensate
10.30 - 11.00	Coffee break	
11.00 - 11.30	Gediminas Juzeliūnas, Institute of Theoretical Physics and Astronomy, Lithuania	Geometric phases for periodically driven quantum systems
11.30 - 12.00	Tilman Zibold, University of Basel, Switzerland	Spatial entanglement patterns and Einstein-Podolsky-Rosen steering in a Bose-Einstein condensate
12.00 - 12.30	Andrea Trombettoni, CNR and SISSA, Italy	Integrable Floquet Hamiltonian for a Periodically Tilted 1D Gas

Venue: Audiovisual Archives and Digitalization Center of the Serbian Academy of Sciences and Arts. The Audiovisual Archives and Digitalization Center is located on the first floor of the building in the street Kneza Mihaila 36 in downtown Belgrade.