

Tentative program 22 February 2024

9:10-9:15 Opening

9:15-9:30 Opening speech of the State Secretary Andrei Alexandru

9:30-9:50 Octavian Moldovan **"Romania's National Quantum Communication Strategy (QTSTRAT) - Considerations on its Development and Content"**

9:50-10:20 Conf. Mihai Carabas, Conf. George Pantelimon-Popescu **"Presentation of RoNaQCI project"**

10:20-10:40 Dr. Sorin Zgura **"QUANTEC: An Open Hub for Advancing Quantum Communication Technologies in Romania"**

10:40-11:00 Dr. Radu Ionicioiu **"Quantum technologies: turning a threat into an opportunity"**

11:00-11:20 Coffee break

11:20-11:40 Dr. Sorin Tascu **"High Vacuum Proton Exchange PPLN waveguides: fabrication and application to quantum communications"**

11:40-12:00 Dr. Liviu Zarbo **"Optimal Photon Counting with Visible Light"**

12:00-12:20 Dr. Luiza Buimaga-Iarunca **"Computational assessment of Aluminum-based Josephson junctions as building blocks for quantum processors"**

12:20-12:40 Dr. Coriolan Tiusan **"Skyrmionic materials and devices as platforms for quantum spintronics"**

12:40-13:40 Lunch

13:40-14:00 Dr. Ciprian Jichici **"State of the art for building quantum computers"**

14:00-14:20 Dr. Nicu Becherescu **"Utilizing Machine Learning for Backward Analysis of Quantum Devices to Pinpoint Efficiency Constraints"**

14:20-14:40 Dr. Rebeca Tudor **"Airy photons for quantum communications"**

14:40-15:00 Dr. Stefan Ataman **"Quantum sensing and metrology: to the shot-noise limit and beyond"**

15:00-15:20 Coffee break

15:20-15:40 Dr. Marian Zamfirescu **"ZnO-based optical microcavities"**

15:40-16:00 Dr. Radu Dragomir **"Quantum circuit representation of entangling and CNOT qubit gates"**

16:00-16:15 Andrei Dragomir **"SIC-POVM tomography in integrated photonics chips"**