

NonGauss Summer School PROGRAM
Palacký University in Olomouc
Sept 12-14, 2022

12.09.2022	Monday
8:30 - 9:00	Opening
9:00 - 11:00	<p style="text-align: center;">Akira Furusawa <i>University of Tokyo</i></p> <ul style="list-style-type: none"> • Optical quantum computers with quantum teleportation I • Optical quantum computers with quantum teleportation II
11:00 - 13:00	Lunch break
13:00 - 15:00	<p style="text-align: center;">Maria Chekhova <i>Max-Planck Institute for the Science of Light, University of Erlangen-Nuremberg</i></p> <ul style="list-style-type: none"> • Parametric amplification: quantum measurements and protection from loss I • Parametric amplification: quantum measurements and protection from loss II
15:00 - 15:30	Coffee break
15:30 - 17:30	<p style="text-align: center;">Shruti Puri <i>Yale University</i></p> <ul style="list-style-type: none"> • Fundamentals of quantum error correction • Leveraging the structure of noise for effective quantum error correction
17:30 - 18:00	Coffee break
18:00 - 19:30	Poster Session

13.09.2022	Tuesday
9:00 - 11:00	<p style="text-align: center;">Alexei Ourjoumtsev <i>Collège de France</i></p> <ul style="list-style-type: none"> • Deterministic generation of non-Gaussian light with an intra-cavity Rydberg superatom I • Deterministic generation of non-Gaussian light with an intra-cavity Rydberg superatom II
11:00 - 13:00	Lunch break
13:00 - 15:00	<p style="text-align: center;">Ferdinand Schmidt-Kaler <i>Johannes Gutenberg Universität Mainz</i></p> <ul style="list-style-type: none"> • Trapped ion quantum computing - from the fundamentals of ion trapping and qubit manipulation to a full stack QC device with HPC-connection • Arrays of trapped ions as emitters of undistinguishable photons into free space - Young double slits, g1 and g2 photon correlations and projective entanglement
15:00 - 15:30	Coffee break
15:30 - 17:30	<p style="text-align: center;">Ana Predojevic <i>University of Stockholm</i></p> <ul style="list-style-type: none"> • Semiconductor quantum light sources • Photonics devices for high photon extraction efficiency
17:30 - 18:00	Coffee break
18:00 - 19:30	Women in Science

14.09.2022	Wednesday
9:00 - 11:00	<p style="text-align: center;">Philipp Treutlein <i>University of Basel</i></p> <ul style="list-style-type: none"> • Quantum metrology with nonclassical states of atomic ensembles • An Einstein-Podolsky-Rosen experiment with two many-particle systems
11:00 - 13:00	Lunch break
13:00 - 15:00	<p style="text-align: center;">Simon Gasparinetti <i>Chalmers University of Technology</i></p> <ul style="list-style-type: none"> • Circuit QED: from microwave quantum optics to quantum computation • Quantum control of a harmonic oscillator using a superconducting qubit
15:00 - 16:00	EU Projects