

## June 25 (Tue), 2019

17.30-19:30 Reception: The Official Residence of the Japanese Ambassador;  
725 Acacia Avenue, Rockcliffe

Please aim to arrive 17.15

For HQS participants, a shuttle bus from the Carleton Suite Hotel will leave promptly for the reception at 17.00

## June 26 (Wed), 2019

8:45 Registration

9:00 Opening address: Chair: Guy Austing (NRC)

Prof. Yoshiro Hirayama (Head of Research Network for Hybrid Quantum Systems Japan),

Dr. Guy Levesque (Associate Vice President of Research, University of Ottawa),

Dr. Roman Szumski (Vice President of Life Sciences NRC),

Prof. Louis Barriault (Dean of Science, University of Ottawa)

— Quantum dots I — Chair:...Andy Sachrajda (NRC)

9:20 Keiji Ono (RIKEN)

“A high-temperature silicon qubit and its quantum interference”

9:50 Sergei Studenikin (NRC)

“Tunable single-hole EDSR in a lateral GaAs/AlGaAs quantum dot device”

10:20 Coffee

— Opto-mechanics, mechanical vibrations, phonons — Chair:...Hiroshi Yamaguchi (NTT)

10:50 Mona Berciu (University of British Columbia)

“Using polaronic effects to engineer the dispersion and effective interactions of quasiparticles”

11:20 Ryuichi Ohta (NTT)

“Mechanical control of localized excitons: Strain-induced coupling between dark and bright states and mechanical control of exciton lifetimes”

11:50 Paul Barclay (University of Calgary)

“Diamond opto-mechanical devices for coupling photons, phonons and spins”

12:20 Lunch

— Hybridization I — Chair:...Koji Ishibashi (RIKEN)

14:00 Takao Aoki (Waseda University)

“Coupled-Cavities Quantum Electrodynamics”

14:30 Francois Sfigakis (University of Waterloo)

To be confirmed

15:00 Akira Oiwa (Osaka University)

“Photon-spin quantum interface using gate-defined quantum dots”

15:30 Coffee

— **2D materials, Topological crystals** — Chair:...Kazuhiko Hirakawa (University of Tokyo)

16:00 Satoshi Iwamoto (University of Tokyo)

“Confinement of light in semiconductor using topological concept”

16:30 Kin-Fai Mak (Cornell University)

“Path towards exciton condensation at high temperatures”

17:00 Ryota Negishi (Osaka University)

“Anomalous electrical transport properties of multilayer graphene with turbo-stratic stacking fabricated by CVD on graphene templates”

17:30 Combined Poster Session & Pizza Dinner