

June 27 (Thurs), 2018

— Nano-magnetics and magnetic field sensing — Chair:...Guy Austing (NRC)

9:00 Mark Freeman (University of Alberta)

“Hybrid nanomagnetic-nanomechanical systems”

9:30 Junko Ishi-Hayase (Keio University)

“Quantum Protocols for AC Magnetic Field Sensing using Nitrogen-vacancy Centers in Diamond”

— Photonics and sensing — Chair:...Jean-Michel Ménard (University of Ottawa)

10:00 Kazuhiko Hirakawa (University of Tokyo)

“Terahertz dynamics of electron-vibron coupling in single molecules with tunable electrostatic potential”

10:30 Coffee

11:00 Amr Helmy (University of Toronto)

“Integrated Photonic Paradigms which enable Emerging Quantum Technologies”

11:30 Yuichiro Matsuzaki (AIST)

“Quantum remote sensing with asymmetric information gain”

12:00 Lunch

— NV centers — Chair:...Dan Dalacu (NRC)

13:30 Jack Sankey (McGill University)

“Spin Transfer Controlled Magnetic Dynamics Probed with a Single Bulk NV Spin”

14:00 Shintaro Nomura (Tsukuba University)

“Wide-field imaging of microwave with nitrogen-vacancy center ensembles in diamond”

— Quantum dots II — Chair:...Kae Nemoto (National Institute of Informatics)

14:30 Mikio Eto (Keio University)

“Physics in double quantum dot in parallel”

15:00 Moritz Cygorek (University of Ottawa)

“Photons and excitons: million-atom InAs/InP nanowire quantum dots”

15:30 Michihisa Yamamoto (RIKEN, University of Tokyo)

“Measurement of the Kondo cloud length”

16:00 Coffee

— Hybrid II — Chair:…Yoshiro Hirayama (Tohoku University)

16:30 Eva Dupont-Ferrier (University of Sherbrooke)

“Hybrid devices: interfacing spins in silicon with superconducting resonators”

17:00 Marek Korkusinski (NRC)

“Interaction of Nuclear and Electron Spins in a Hybrid Quantum System”

17:30 **Closing:** Pawel Hawrylak (University of Ottawa), Yoshiro Hirayama (Tohoku University)