Lunch Break

Session MO-P1: Quantum Spin Systems

MO-P1-1 (13:15-13:45)

Towards nitrogen-vacancy colour centre lasers for high sensitivity magnetometry (invited)

A. Greentree
RMIT University

MO-P1-2 (13:45-14:00)

Magnetic-field sensing with quantum error detection under the effect of energy relaxation

Y. Matsuzaki[1] and S. Benjamin[2]
[1]NTT Basic Research Laboratories, [2]Department of Materials, University of Oxford,

MO-P1-3 (14:00-14:15)

Electron transport in quantum point contact with hyperfine interaction under finite magnetic field

T. Aono,[1] M. Kawamura,[2] P. Stano,[2,3] K. Ono,[2] and T. Komine[1]
[1]Faculty of Engineering, Ibaraki University, [2]RIKEN Center for Emergent Matter Science, [3]Institute of Physics, Slovak Academy of Sciences

MO-P1-4 (14:15-14:30)

Resistively detected NMR line shapes in a quasi-one-dimensional electron system

M. H. Fauzi[1,2], A. Singha[3], M. F. Sahdan[1], M. Takahashi[1], K. Sato[1], K. Nagase[1], B. Muralidharan[3], and Y. Hirayama[1,2]
[1]Department of Physics, Tohoku University, [2]CSRN, Tohoku University, [3]Department of Electrical Engineering, IIT-Bombay

MO-P1-5 (14:30-14:45)

Relaxation to negative temperatures in spin domain systems

Y. Hama,[1] W. J. Munro,[1,2] K. Nemoto[1]
[1]National Institute of Informatics, [2]NTT Basic Research Laboratories

MO-P1-6 (14:45-15:00)

Nuclear spins in quantum dot spin qubits

P. Stano,[1] T. Nakajima,[1] T. Otsuka,[1] J. Yoneda,[1] L. Camenzind,[2] L. Yu,[2] D. Loss,[1,2] S. Tarucha,[1] D. Zumbühl[2]

[1]CEMS, RIKEN, [2]Department of Physics, University of Basel

MO-P1-7 (15:00-15:15)
Real-space mapping of nuclear resonance spectroscopy in a quantum-Hall system
K. Hashimoto, T. Tomimatsu, and Y. Hirayama
Department of Physics, Tohoku University

Coffee Break

Session MO-P2: Quantum Manipulation

MO-P2-1 (15:45-16:15)
Andreev quantum dots (invited)
C. Urbina
CEA-Saclay

MO-P2-2 (16:15-16:30)
Microwave irradiation as an alternative method for controlling the energy detuning of a superconducting flux qubit
H. Toida, T. Ohrai, Y. Matsuzaki, K. Kakuyanagi, H. Yamaguchi, and S. Saito
NTT Basic Research Laboratories

MO-P2-3 (16:30-16:45)
Toward spin coupling of double QDs to superconducting coplanar waveguide cavities
R. Wang,[1] R.S. Deacon,[1,2] J. Sun,[1] J. Yao,[3] C.M. Lieber,[4] D. Car[5], E.P.A.M. Bakkers,[5] and K. Ishibashi[1,2]
[1]Advanced Device Laboratory, RIKEN, [2]Center for Emergent Matter Science (CEMS), RIKEN, [3]Deparment of Chemical Biology, Harvard University, [4]Division of Engineering and Applied Sciences, Harvard University, [5]Department of Applied Physics, Eindhoven University of Technology

MO-P2-4 (16:45-17:00)
Quantum transport assisted by non-Markovian environment
C. Uchiyama[1], W. J. Munro[2] and K. Nemoto[3]
[1]Graduate School of Interdisciplinary Research, Univ. of Yamanashi, [2]NTT Basic Research Laboratories, [3]National Institute of Informatics

MO-P2-5 (17:00-17:15)