

ISQNS 2022

International Symposium on Quantum Nano Science

DATE: January 13th, 2022

LOCATION: (FACE-to-FACE) Second Forum, Morito Memorial Hall,
Kagurazaka Campus, Tokyo University of Science

(ONLINE): ZOOM (Meeting ID and passcode will be sent to participants.)

Schedule

Chairperson: Hideaki Takayanagi

Welcome (Hideaki Takayanagi)

10:00
10:10 20:10(EST) **Quantum error correction of a logical qubit**

zoom Michel Devoret (Yale University)

10:40 17:40(PST) **Computing with Noisy Superconducting Quantum Processors**

zoom Irfan Siddiqi (UC Berkeley)

11:10
Break

11:20 **Planar integration of superconducting qubits**

(onsite) Jaw-Shen Tsai (Tokyo University of Science)

11:50 **Three qubit operations for error correction in silicon**

zoom Seigo Tarucha (RIKEN, Tokyo University of Science)

12:20
Break

Chairperson: Jaw-Shen Tsai

13:30 **Quantum dot-based single photon sources towards quantum integrated systems**

zoom Yasuhiko Arakawa (The University of Tokyo)

14:00 **Quantum sensing using a superconducting flux qubit**

zoom Shiro Saito (NTT)

14:30
Break

14:40 **Autonomous quantum error correction in a four-photon Kerr parametric oscillator**
(onsite) Sangil Kwon (Tokyo University of Science)

15:10 6:10(GMT) **Efficient Criteria of Quantumness for a Large System of Qubits**

zoom Alexandre Zagorin (Loughborough University)

15:40 14:40(CST) **Superconducting Quantum Computing**

zoom Xiao-Bo Zhu (University of Science and Technology of China)

16:10 **Concluding Remarks (Jaw-Shen Tsai)**

16:20 **Closing**

(All the presentations will be broadcasted on Zoom.)

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