

Session Program

25-26 May 2026

The First RIKEN Quantum International Workshop on Frontiers of Quantum Computing Applications and Quantum-HPC Integration

Session 3

2F Administrative Headquarters (C00), RIKEN, Wako, Large Conference Room

Monday 25 May

15:40

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Session | **Location:** 2F Administrative Headquarters (C00), RIKEN, Wako, Large Conference Room | **Convener:** Xiaoyang Wang

15:40-16:20

Toward Practical Materials Screening Beyond 50 Qubits Enabled by Quantum-HPC QSCI-AFQMC

Speaker
Toshihiro Aoki

16:20-17:00

Sample-Based Quantum Diagonalization of Lattice Gauge Theory Hamiltonians

Speaker
Yutaro Iiyama

17:00-17:20

Quantum Computing of Rovibrational Energy Levels in Molecules

Speaker
Erik Loetstedt

17:20-17:40

Dissipative Ground-State Preparation of a Quantum Spin Chain on a Trapped-Ion Quantum Computer

Speaker
Kazuhiro Seki

17:40