

International Symposium on Advanced Quantum Hardware

Date: May 21, 2025

**Venue: Engineering Science International Hall,
Toyonaka Campus, The University of Osaka**

Access: <https://www.osaka-u.ac.jp/ja/access/top> (Jpn)

<https://www.osaka-u.ac.jp/en/access/top> (Eng)

Invited speakers

- Shinsuke Haze (The University of Osaka)
- Alto Osada (The University of Osaka)
- Kazuhisa Ogawa (The University of Osaka)
- Grahame Vittorini (Quantinuum)
- Nathan Lysne (Quantinuum)
- Atsushi Noguchi (University of Tokyo / RIKEN)
- Takanori Nishi (University of Tokyo)

Registration

<https://forms.gle/aLgmAWRsQmxXpKgi9>



Co-sponsored by RIKEN-TRIP and QIQB, The University of Osaka



Program

9:00-9:10 Opening remarks by Dr. Kenji Toyoda (The University of Osaka)

Session 1:

9:10-9:50 "*Tentative: Research Advancements at Quantinuum*" (Dr. Grahame Vittorini, Quantinuum)

9:50-10:30 "*Rydberg excitation of strontium atoms for interfacing neutral atoms and trapped ions*" (Dr. Shinsuke Haze, The University of Osaka)

10:30-10:50 Break

Session 2:

10:50-11:30 "*Problems and prospects of trapped-ion quantum devices with integrated photonics*" (Dr. Alto Osada, The University of Osaka)

11:30-12:10 "Bosonic encoding with local modes of trapped ions", (Dr. Takanori Nishi, University of Tokyo)

12:10-13:30 Lunch

Session 3:

13:30-14:10 "*Development of Superconducting Quantum Computer at QIQB, The University of Osaka*" (Dr. Kazuhisa Ogawa, The University of Osaka)

14:10-14:50 "*Tentative: Research Advancements at Quantinuum*" (Dr. Nathan Lysne, Quantinuum)

14:50-15:30 "Hybrid technologies with high performance superconducting circuits" (Dr. Atsushi Noguchi, University of Tokyo / RIKEN)

15:30-15:40 Closing remarks

16:00-17:30 Lab tours