

Winter School: Quantum Error Suppression, Mitigation, and Correction

Monday February 3, 2025

- 8:00–8:55 *Check-in/Breakfast (hosted by IPAM)*
- 8:55–9:00 *Welcome and Opening Remarks*
- 9:00–10:30 **Louis Golowich** (University of California, Berkeley (UC Berkeley))
Quantum Error Correction Tutorial I
- 10:30–11:00 *Break*
- 11:00–12:30 **Louis Golowich** (University of California, Berkeley (UC Berkeley))
Quantum Error Correction Tutorial II
- 12:30 *Group Photo*
- 12:30–2:00 *Lunch (on your own)*
- 2:00–3:30 **Misha Lukin** (Harvard University)
Logical quantum processor with neutral atom arrays I
- 3:30–4:00 *Break*
- 4:00–5:30 **Misha Lukin** (Harvard University)
Logical quantum processor with neutral atom arrays II
- 5:30–7:00 *Poster Session & Reception (Hosted by IPAM)*

Tuesday February 4, 2025

- 8:00–8:55 *Check-in/Breakfast (hosted by IPAM)*
- 9:00–10:30 **Ewout Van den Berg** (IBM Research)
Quantum error mitigation I
- 10:30–11:00 *Break*
- 11:00–12:30 **Ewout Van den Berg** (IBM Research)
Quantum error mitigation II
- 12:30–2:00 *Lunch (on your own)*
- 2:00–3:30 **Cody Jones** (Google Quantum AI)
QEC below the surface code threshold I
- 3:30–4:00 *Break*

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(Tuesday schedule continued from previous page)

4:00–5:30 **Cody Jones** (Google Quantum AI)
QEC below the surface code threshold II

Wednesday February 5, 2025

8:00–8:55 *Check-in/Breakfast (hosted by IPAM)*

9:00–10:30 **Yufei Ding** (University of California, San Diego (UCSD))
qLDPC codes

10:30–11:00 *Break*

11:00–12:30 **Yuval Baum** (Q-CTRL, Inc)
From theory to practicality - enabling near term applications

