

Quantum error suppression for quantum simulation

Monday 24 March 2025 15:55 (35 minutes)

In this talk, I will provide a brief introduction to quantum error correction and mitigation, emphasising their requirements and applicability in quantum simulation. I will then discuss the interplay between these techniques in the emerging early fault-tolerant era, highlighting how quantum error mitigation can be effectively applied to sampling-based algorithms such as quantum phase estimation, which was previously thought to be impossible.

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Session Classification: Invited Speakers and Contributions