



Contribution ID: 365

Type: **Talk (preferred)**

Low Depth Parity Check Gate set for Quantum Error Correction

Monday 12 December 2022 11:45 (15 minutes)

We build low depth parity check gate set such that these gates become the most natural gate for QEC implementation. By building gates that are fundamental to QEC rather than universal computation, we can boost the threshold and ease the experimental hardness.

Primary author: USTUN, GOZDE (UNSW)

Co-authors: MORELLO, Andrea (University of New South Wales); DEVITT, Simon (UTS)

Presenter: USTUN, GOZDE (UNSW)

Session Classification: AIP: Quantum Science and Technology

Track Classification: AIP Congress: AIP: Quantum Science and Technology