Contribution ID: **545**   Type: **Talk (preferred)**

Reducing Overhead for Quantum Advantage in Topological Data Analysis

Tuesday 13 December 2022 11:45 (15 minutes)

Topological data analysis is an important way of understanding features of data, but can be exponentially hard classically. We present new ways of performing topological data analysis on a quantum computer with improved complexity.

Author: BERRY, Dominic (Macquarie University)

Co-authors: Dr RAJPUT, Abhishek (University of Toronto); Dr GYURIK, Casper (Leiden University); Dr BASSO, Joao (Google Quantum AI); Prof. WIEBE, Nathan (University of Toronto); Dr BABBUSH, Ryan (Google Quantum AI); Dr DJUNKO, Vedran (Leiden University); Dr SU, Yuan (Google Quantum AI)

Presenter: BERRY, Dominic (Macquarie University)

Session Classification: AIP: Quantum Science and Technology

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