Contribution ID: **29** Type: **Poster**

Benchmarking quantum computers using quantum state matching of qubits

Wednesday, 25 May 2022 16:10 (20 minutes)

We present our advances on the implementation of a measurement-induced nonlinear protocol for quantum state matching using some commercially available quantum computers. Using this implementation, we present a benchmark that detects quantitatively the device specific errors. In contrast to current benchmarks trends, our circuit is a non-random deep circuit. Among the devices analyzed, we discuss briefly which are more promising.

Primary authors: ORTEGA, Adrian (Wigner Research Centre for Physics); KÁLMÁN, Orsolya (Wigner Research Centre for Physics); KISS, Tamás (Wigner Research Centre for Physics)

Session Classification: Poster