



Contribution ID: 182

Type: **Parallel Talk**

Error mitigation strategies for simple quantum systems

Thursday, 3 August 2023 16:40 (20 minutes)

Quantum hardware in the NISQ era suffers from noise, which affects the reliability and accuracy of quantum computation. Here we present a comparison of quantum error mitigation strategies for Hamiltonian simulation and variational quantum algorithms, using as test bench some simple quantum fermionic systems and discrete gauge theories.

Topical area

Quantum Computing and Quantum Information

Primary authors: ZAMBELLO, Kevin (University of Pisa and INFN - Sezione di Pisa); BONATI, Claudio (University of Pisa and INFN Pisa); CLEMENTE, Giuseppe (DESY); D'ELIA, Massimo (University of Pisa and INFN Pisa); MAIO, Lorenzo (INFN and University of Pisa); PARIENTE, Ruben (INFN Pisa)

Presenter: ZAMBELLO, Kevin (University of Pisa and INFN - Sezione di Pisa)

Session Classification: Quantum Computing and Quantum Information