Contribution ID: 21 Type: not specified

## Optimization of Quantum Channels and its Applications to Quantum Computing

Tuesday, 10 September 2024 11:50 (20 minutes)

We introduce a framework for the optimization of parameterized quantum channels induced by both noise in quantum circuits and control noise, exploring a wide range of quantum computing applications. In particular, we discuss the tradeoff between the implementation with either Stinespring, stochastic, or combinations of both representations, in the context of some practical use cases.

**Title** 

**Author** 

**Primary author:** CLEMENTE, Giuseppe (University of Pisa and INFN)

**Presenter:** CLEMENTE, Giuseppe (University of Pisa and INFN)