Building Kernels for Advanced Discrimination #23

New issue

Open **nbronn** opened this issue yesterday · 0 comments

nbronn commented yesterday

Abstract

Explore different ways of classifying and analyzing the results of qubit measurements.

Description

Measurement kernels allow different methods for qubit state discrimination (see tutorial). This may involve processing level 0 (voltage waveform) data to level 1 (IQ) data to level 2 (classified) data. Aspects which could be interesting to study include

- Discrimination of multi-qubit states, which could be affected by crosstalk in the joint measurement
- Simulation of repeated measurements using post-selection
- Machine learning to discriminate states, including higher-order transmon levels (see here and here

Members

- **@nbronn**
- Qiskit Coach: **@nbronn**

Deliverable

GitHub repo

1ucian0 added the **from Coach** label
16 hours ago

hodgestar commented 12 minutes ago

Assignees

No one assigned

Labels

from Coach

Projects

None yet

Milestone

No milestone

3 participants