

sdmay23-24: Quantum Computing

Week 5 Report

October 24 - October 28

Team MembersNicholas Greenwood — *Admin / Qubits*Jacob Frieden — *QML / Admin help*Sam Degnan — *Error Correction*Colin Gorgen — *Quantum Gates*Arvid Gustafson — *Global Design / Noise*Emile Albert Kum Chi — *Implementation / Electrical design***Summary of Progress this Report**

This week we were missing Sam, and Arvid joined virtually. Most of what we talked about was with regards to the viability of continuous transfer of ions between ion traps.

We talked about the global design that a node should have to be able to successfully transfer ions and have minimal interference

Pending Issues

Gavin (grad student advisor) will be testing the viability of the ion transfer and finishing his paper. All team members will read and analyze the state-of-the-art paper

Plans for Upcoming Reporting Period

Gavin will present his paper at the next meeting, and that will become the basis that we move forward under. The rest of us will all present on our sections referenced in the state-of-the-art paper that became important a few weeks ago.

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Nicholas Greenwood	Looked into deadlock and quantum volume, participated in global design discussion	9	0
Jacob Frieden	Participated in design discussion	7	0
Sam Degnan	Read about error discussion in Mike & Ike, was not in meeting	6	
Colin Gorgen	Participated in discussion, watched videos on quantum mechanics to deepen understanding, worked on lightning talk presentation	9	
Arvid Gustafson	Participated in discussion, helped on design	8	0

	doc		
Emile Albert Kum Chi	Participated in discussion, worked on Lightning talk presentation, investigated 3D manufacturing viability		0

Gitlab Activity Summary

Nothing to report.
