

sdmay23-24: Quantum Computing

Week 1 Report

September 26 - September 30

Team MembersNicholas Greenwood — *Qubits / Manager*Arvid Gustafson — *Noise / Interference*Jacob Frieden — *QML / QIS*Colin Gorgen — *Quantum Gates*Sam Dengen — *Error Correction*Emile Alber Kum Chi — *Quantum design***Summary of Progress this Report**

Every person did a summarization of knowledge learned:

Arvid: Talked about qubits and how they exist

Emile: Talked about integration and how to translate traditional circuit design into quantum circuit design

Jacob: Discussed creation of Bell state / EPR pair

Colin: Worked with Qiskit and tried understanding the quantum Fourier transform

Nick: Talked about various pieces of vocab (T1 vs T2 coherence time, Doppler Cooling, Physical vs Logical Qubits)

Sam: Talked about math questions

Pending Issues

NA

Plans for Upcoming Reporting Period

Continue reading Mike & Ike

Look into Qiskit - quantum software dev kit with documentation, can simulate fundamental quantum concepts

Look into IBM Quantum Computing Simulator

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Nicholas Greenwood	Refer to previous section	8	0
Arvid Gustafson	Refer to previous section	8	0
Jacob Frieden	Refer to previous section	8	0
Colin Gorgen	Refer to previous section	8	
Sam Dengen	Refer to previous section	8	
Emile Alber Kum Chi	Refer to previous section	8	

Gitlab Activity Summary

Nothing to report.
