

Gregory Meyer

in literature: Gregory D. Kahanamoku-Meyer

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Education

- 2017–present **Physics PhD (expected 2022), University of California at Berkeley**
Lab of Dr. Norman Yao, Department of Physics
- 2016 **B.S. Physics (Intensive Track), Yale University**
Distinction in the Major; cum laude
GPA: Cumulative 3.85; Physics 3.96; Computer Science 4.00

Research Projects

Forging quantum data: classically defeating an IQP-based quantum test

Broke a cryptographic test of quantumness that had remained open for 10 years. Implemented in Julia. arxiv.org/abs/1912.05547

dynamite

Python library with C backend for the efficient, MPI-parallelized simulation of many-body quantum dynamics using Krylov subspace methods. dynamite.readthedocs.io

Quantum optimal control

Second undergraduate thesis at Yale. Applied the GRAPE algorithm to the optimization of pulse sequences for control of superconducting qubits coupled to microwave cavities.

High energy particle physics at CERN

First undergraduate thesis at Yale. Large-scale analysis of data from the ATLAS experiment.

Programming

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|------------------------|---|
| <i>Languages</i> | Python, Julia, C, C++, ... |
| <i>Parallelization</i> | MPI, OpenMP, CUDA |
| <i>Libraries</i> | Cython, NumPy, SciPy, ... |
| <i>Contributed to</i> | PETSc, matplotlib, Xournal++ |
| <i>GitHub</i> | github.com/GregDMeyer |

Graduate Electives

Quantum Computing (U. Vazirani)

Parallel Computing (K. Yelick, J. Demmel)

Cryptography (S. Garg)

Interactive and Probabilistically Checkable Proofs (A. Chisea)

Awards and Fellowships

- 2018-21 **Natnl. Defense Science & Engineering Graduate Fellow (NDSEG)** *Dept. of Defense – \$115,200 + tuition, fees, health care*
- 2018 **Graduate Research Fellow (GRFP)** (declined) *National Science Foundation – \$102,000 + institutional grant*
- 2017 **Heising-Simons Fellowship in Physics** *UC Berkeley – \$67,000*
- 2016 **Howard L. Schultz Award** *Yale Physics Department – \$1,000*
- 2015 **Summer Undergraduate Research Fellow** *NIST Boulder – \$9,100*
- 2014 **Yale Science Scholars Program** *Yale University – \$4,500*
- 2013-14 **Alan S. Tetelman 1958 Fellow** *Yale University – \$7,000*