



Quantum Computing Internship for Physics Undergraduates (Virtual over Zoom)

June 20 2022 - July 8 2022

What will I do?

In this three-week online program, participants will gain hands-on experience programming for existing quantum computers using Python and Qiskit. This will be supplemented by daily lectures on the fundamentals of quantum mechanics and quantum computing. The program will culminate in participants running their own code on an IBM quantum computer.

What will be covered?

- Fundamentals of quantum mechanics
- Computational complexity: why we need quantum computers
- Physics simulations on classical and quantum computers
- Noisy quantum devices & quantum error correction

Who can apply?

Open to physics students enrolled at U.S. colleges or universities who have completed freshman-level physics coursework. Exposure to quantum mechanics and programming is useful but not required. The program aims to increase diversity in scientific research and the engineering workforce; students from all backgrounds are encouraged to apply. Must be eligible to work in the US.

Is there any financial support?

All students participating in this program will be paid a competitive stipend.

How do I apply?

Applicants should submit an unofficial transcript and brief statement of interest via <https://fermilab.jobs> by March 1. Acceptance notifications will be given by March 31.

For more information, contact:
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