



## Quantum Information Science and Technology Summer Camp



Calling all High School students! Ever wondered what quantum information science is? Now's your chance to experience it firsthand through games, simulations, hands-on experiments, and basic quantum computing.

Quantum information science and technology is always at your fingertips, literally. Many advances in smartphone, tablet, and computer technology are inspired by quantum science. Quantum science has the potential to continue to transform science and technology through real world applications including new sensors for biotechnology and defense; next-generation positioning, navigation, and timing systems; new approaches to understanding materials, chemistry, and even gravity; novel algorithms for machine learning; and new cyber security systems. In other words, quantum science is the future, and this is your chance to begin understanding and exploring this developing field.

Learn about quantum ideas including:

1. Quantum principles: interference, polarization, and diffraction;
2. Building quantum circuits with Quantum Composer (IBM);
3. Research trends in quantum science and computing;
4. Quantum computing careers and academic pathways

**WHO:** Students entering grade 10, 11, or 12 in the Fall of 2025

**WHEN:** August 18 – 22, 2025, 9:30 am – 2:30 pm

**WHERE:** New York Hall of Science, 47-01 111st, Corona, Queens, NY 11368

**HOW:** Complete the student application: [forms.gle/w1hkBdcyohGZ3tu17](https://forms.gle/w1hkBdcyohGZ3tu17)

This program will be taught by Dr. Angela Kelly, Dr. Dominik Schneble, and Dr. Tzu-Chieh Wei from Stony Brook University's Department of Physics & Astronomy. Students will receive a certificate of completion from Stony Brook University and can list participation on their resumes and college applications.

No background in programming, physics, or advanced mathematics is necessary.

There is no cost for this program. Program tuition and daily lunches are fully funded by the National Science Foundation.

New York Hall of Science

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