

QUANTUM TOPICS SEMINAR

LIGHT, SILICON, AND STEEL: PSIQUANTUM'S PATH TO UTILITY-SCALE, FAULT TOLERANT QUANTUM COMPUTING



AARON FLUITT

SENIOR DIRECTOR OF TECHNOLOGY
PARTNERSHIPS, PSIQUANTUM

Aaron Fluitt is senior director of technology partnerships at PsiQuantum. He leads the company's engagement with the quantum technology ecosystem in the greater Chicago region, including research universities and national laboratories. Before joining PsiQuantum, he worked at Argonne National Laboratory and the Boston Consulting Group. He earned his Ph.D. in molecular engineering at the University of Chicago.

Since its founding, PsiQuantum has been singularly focused on its goal of building and deploying a utility-scale, fault-tolerant quantum computer (FTQC) as fast as possible. In this talk, I will outline the pillars of PsiQuantum's technology that have brought this ambitious goal within reach: a photonic architecture with full error correction, high-volume manufacturing at a Tier 1 foundry, and high-power cryogenic cooling. I will share recent work on FTQC applications designed to deliver impact to the pharmaceutical, chemicals, and energy industries, among others. As PsiQuantum shifts to its next phase—the deployment of utility-scale FTQCs in Brisbane, Australia, and at the Illinois Quantum and Microelectronics Park in Chicago—I will share information on opportunities that are available now and in the foreseeable future.

APRIL 8TH, 2025 1:30-2:30 P.M. EST
BIRCK NANOTECHNOLOGY CENTER ROOM 1001

JOIN OVER ZOOM
[HTTPS://PURDUE-EDU.ZOOM.US/J/95184332708](https://PURDUE-EDU.ZOOM.US/J/95184332708)



Purdue Quantum Science
and Engineering Institute