

Imperial College London Forges New Quantum Research Collaborations with the USA

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Imperial College London has successfully concluded the Quantum ICoNYCh project, a series of workshops and knowledge exchange initiatives designed to foster stronger quantum research collaborations between the UK and the USA.

Funded by the UK Government's Department for Science, Innovation and Technology (DSIT), the project brought together leading researchers from Imperial's Quantum Engineering Science and Technology Centre (QuEST), the Chicago Quantum Exchange, and the emerging New York quantum ecosystem. The initiative commenced with a virtual town hall in November 2024, uniting members from all three locations.

Subsequently, QuEST members engaged in targeted knowledge exchanges, involving reciprocal visits between Imperial and its US counterparts. These focused discussions allowed researchers to explore shared research interests in one-on-one and small group settings.

To further expand collaborative opportunities, the project organized two key workshops. The first took place in early March 2025, with an Imperial delegation visiting the Chicago Quantum Exchange to identify potential synergies. This was followed by a two-day workshop hosted by QuEST at Imperial on March 24-25, 2025, which convened quantum experts from London, New York, and Chicago.

The Chicago workshop included a visit to the University of Chicago, facilitating in-depth discussions on shared research interests in quantum technologies. The Imperial delegation also toured the Fermi National Laboratory, exploring potential collaborations in superconducting materials and their applications in quantum technologies.

Professor Peter Haynes, Head of the Centre for Quantum Engineering, Science, and Technology (QuEST) at Imperial, commented, “This workshop was one of the most rewarding I have participated in, both because of the researchers’ enthusiasm on both sides and the number of promising topics that emerged where international collaboration would add significant value.”

The concluding workshop at Imperial provided a platform to celebrate new connections and focus on future research collaborations and partnerships. Researchers shared insights across various fields, including optical quantum information processing, quantum machine learning, solid-state qubits, and molecules for quantum science. US-based attendees also toured Imperial’s cutting-edge quantum research laboratories.

Professor Haynes concluded, “The ICoNYCh project has exceeded expectations in terms of its productivity in seeding trans-Atlantic collaborations in promising areas of mutual interest that we are now actively pursuing. QuEST thanks everyone involved in the project and we look forward to future collaborations on the exciting topics identified.”

The Quantum ICoNYCh project marks a significant step in strengthening international cooperation in the rapidly advancing field of quantum science and technology, paving the way for future joint research endeavors between the UK and the USA.