CHICAGO QUANTUM SUMMIT

November 3-4, 2025

Hosted by the Chicago Quantum Exchange

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CHICAGO QUANTUM EXCHANGE

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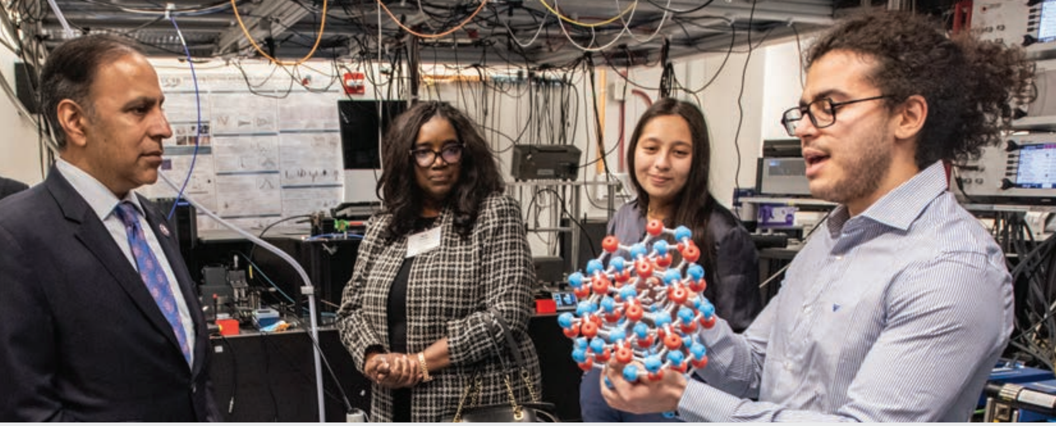

To read about our speakers, view and customize your agenda, connect with other attendees and more, please download the Whova app: **https://tinyurl.com/cqswhova2025**

WIFI network: **Convene Guest**

You can also see the agenda and access event information at: **https://chicagoquantum.org/summit2025**

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Regional Innovation Engine Development Award
Advancing quantum technologies in the Midwest
The US National Science Foundation (NSF) under Award 2315739

The Bloch Quantum Tech Hub Accelerator Award
The US Economic Development Administration (EDA) Grant Number: ED24HDQ0G0559

Welcome

Welcome to the eighth annual Chicago Quantum Summit. The United Nations declared 2025 the International Year of Quantum in recognition of 100 years since the initial development of quantum mechanics. Much has happened in the past century; indeed, much has happened in the past year as this vibrant and promising sector has continued to advance. Quantum technology is projected to drive billions of dollars in global economic impact by 2035 — as much as $80 billion in the Illinois-Wisconsin-Indiana region alone. Here at the Chicago Quantum Exchange, we've welcomed nearly two dozen new corporate partners in the past year and a half — a testament to the sector's growth, which is accelerating faster than many of us imagined.

Over the next two days, you will hear from industry, government, and academic leaders whose contributions are shaping this bold quantum future. This year, we will feature three tracks — Frontiers, Innovations, and Futures — to highlight the progress being made across the field. Take this opportunity to engage in sessions that cover a wide range of topics, ask questions, and connect with Summit attendees from around the world. We also encourage you to attend presentations by the international Boeing Quantum Creators Prize awardees and to learn more about research across the Quantum Prairie at Monday evening's poster presentations.

In addition, this year's Summit anchors the inaugural Midwest Quantum Week. Use the QR code on p. 8 to see a list of events.

Thank you for coming. Enjoy the Summit.

David Awschalom
Liew Family Professor of Molecular Engineering and Physics, University of Chicago; Senior Scientist, Argonne National Laboratory; Director, Chicago Quantum Exchange

Kate Waimey Timmerman
CEO, Chicago Quantum Exchange

Monday, November 3

Time		**TRACK: INNOVATIONS** *Industry and commercialization* **The Hall**
9:00 a.m.	**Welcome**, David Awschalom, Director, CQE; Paul Alivisatos, President,	
9:15 a.m.	**Cathy Foley**, Australia's Former Chief Scientist, Independent Non-Executive Director *The Hall*	
9:30 a.m.		
9:45 a.m.	**BREAK**, *Franklin Gallery (Sponsored by Unisys)*	
10:00 a.m		**Rajeeb Hazra**, CEO, Quantinuum
10:15 a.m.		
10:30 a.m.		**Celia Merzbacher**, Executive Director, QED-C
10:45 a.m.		
11:00 a.m.		**Hanhee Paik**, Director of Quantum Algorithms, IBM *(Presented by IBM)*
11:15 a.m.		
11:30 a.m. ↓	**LUNCH**, *Franklin Gallery*	
1:00 p.m.	**Paul Dabbar**, Deputy Secretary, US Department of Commerce *The Hall*	
1:15 p.m.		
1:30 p.m.	**BREAK**, *Franklin Gallery (Sponsored by Dirac Labs)*	
1:45 p.m.		**Taro Shimada**, President and CEO, Toshiba Corporation
2:00 p.m.		
2:15 p.m.		**Quantum Networking Security** Ramana Kompella, Cisco Konstantinos Karagiannis, Protiviti
2:30 p.m.		
2:45 p.m.		
3:00 p.m.		
3:15 p.m.	**BREAK**, *Franklin Gallery*	
3:30 p.m.		**Connecting Quantum Domains for Scale** Jonah Hill, Xanadu Kelsey Ortiz, Photon Queue Jordan Shapiro, IonQ *Mod:* Panagiotis Spentzouris, Fermilab
3:45 p.m.		
4:00 p.m.		
4:15 p.m.		
4:30 p.m.	**RECEPTION AND POSTER SESSION** *Jackson Gallery and Franklin Gallery (Presented by the Consulate General of Canada in Chicago)*	
4:45 p.m.		
5:00 p.m.		
5:15 p.m.		
5:30 p.m.		

TRACK: FUTURES *Quantum and society* The Hub	TRACK: FRONTIERS *Research and discovery* The Forum	
UChicago; JB Pritzker, Governor, Illinois, *The Hall*		9:00 a.m.
		9:15 a.m.
		9:30 a.m.
		9:45 a.m.
Responsibly Developing Quantum Tech Aziz Huq, UChicago Law School Faye Wattleton, EeroQ *Mod:* Jeanne Whalen, WSJ	**Jay Lowell**, Principal Senior Technical Fellow, Boeing	10:00 a.m.
		10:15 a.m.
	Boeing Quantum Creators Seokjin Bae Margarita Davydova Rhine Samajdar	10:30 a.m.
		10:45 a.m.
Robert Visser, VP, CTO Office, Applied Materials		11:00 a.m.
		11:15 a.m.
		11:30 a.m. ↓
		1:00 p.m.
		1:15 p.m.
		1:30 p.m.
Catherine Lefebvre, Senior Advisor, GESDA and Open Quantum Institute	**DOE QIS Centers: Next Horizons** Bert de Jong, Lawrence Berkeley (LBNL) Charles Black, Brookhaven (BNL) Martin Holt, Argonne (ANL) Travis Humble, Oak Ridge (ORNL) Anna Grassellino, Fermi (FNAL) *Mod:* Bindu Nair, Department of Energy	1:45 p.m.
		2:00 p.m.
Legal Frameworks for Quantum Growth Hannah Parnes, EeroQ Troy Smith, Infleqtion *Mod:* Robert Karr, Barnes & Thornburg *(Presented by Barnes & Thornburg)*		2:15 p.m.
		2:30 p.m.
		2:45 p.m.
		3:00 p.m.
		3:15 p.m.
Preeti Chalsani, SVP, CQO, Illinois EDC **Harley Johnson**, CEO, IQMP; UIUC *(Presented by Illinois EDC)*	**Software Powering Quantum Progress** Gilad Ben-Shach, Quantum Machines Gustavo Cancelo, FNAL Rajkumar Kettimuthu, ANL Kanav Setia, qBraid *Mod:* Thaddeus Ladd, HRL Laboratories	3:30 p.m.
		3:45 p.m.
		4:00 p.m.
		4:15 p.m.
		4:30 p.m.
		4:45 p.m.
		5:00 p.m.
		5:15 p.m.
		5:30 p.m.

To view agenda and speaker details, customize your schedule, and more, please view online or download the Whova app: **https://tinyurl.com/cqswhova2025**

Tuesday, November 4

Time		**TRACK: INNOVATIONS** *Industry and commercialization* **The Hall**
9:00 a.m.	**Opening Remarks**, Dorota Brzezinska, Vice Chancellor for Research,	
9:15 a.m.	**Darío Gil**, Under Secretary for Science, US Department of Energy *The Hall*	
9:30 a.m.		
9:45 a.m.	**BREAK**, *Franklin Gallery (Sponsored by Anaplan)*	
10:00 a.m		**Terry Rudolph**, Co-Founder & Chief Architect, PsiQuantum
10:15 a.m.		
10:30 a.m.		
10:45 a.m.		
11:00 a.m.	**BREAK**, *Franklin Gallery (Sponsored by One Region)*	
11:15 a.m.		**Innovating Quantum Sensing** Dana Anderson, Infleqtion Jennifer Choy, UW–Madison Luca Ferrara, SandboxAQ Supratik Guha, UChicago; Argonne
11:30 a.m.		
11:45 a.m.		
12:00 p.m.		
12:15 p.m. ↓	**LUNCH**, *Franklin Gallery*	
1:45 p.m.		**Bridging Computing Platforms** Lorenzo Martinelli, D-Wave Johannes Pollanen, EeroQ Kristen Pudenz, Atom Computing *Mod:* Mandy Birch, TreQ
2:00 p.m.		
2:15 p.m.		
2:30 p.m.		
2:45 p.m.	**BREAK**, *Franklin Gallery*	
3:00 p.m.		
3:15 p.m.		
3:30 p.m.		
3:45 p.m.		
4:00 p.m.		
4:15 p.m.		
4:30 p.m.		
5:00 p.m.		

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TRACK: FUTURES ***Quantum and society*** **The Hub**	**TRACK: FRONTIERS** ***Research and discovery*** **The Forum**	
UW–Madison, *The Hall*		9:00 a.m.
		9:15 a.m.
		9:30 a.m.
		9:45 a.m.
Global Talent for the Quantum Future Stephanie Ashmore, UK Science and Technology Network Emily Easton, CQE Jonathan Grode, Green and Spiegel		10:00 a.m.
	Boeing Quantum Creators Guanhao Huang Francesco Anna Mele Hong Qiao	10:15 a.m.
		10:30 a.m.
		10:45 a.m.
		11:00 a.m.
Quantum Futures in Finance & Risk Troy Campbell, FRB Chicago Caitlin Carnahan, Infleqtion *Mod:* Aaron Kemp, KPMG	**Misha Lukin**, Professor, Harvard University; Co-Founder, QuEra	11:15 a.m.
		11:30 a.m.
	Mung Chiang, President, Purdue **Chetan Nayak**, Technical Fellow, Microsoft	11:45 a.m.
		12:00 p.m.
		12:15 p.m.
		↓
Manufacturing the Quantum Supply Chain Katyayani Seal, Single Quantum USA Joshua Milem, Bluefors Scott Yano, Lake Shore Cryotronics	**Boeing Quantum Creators** Uma Girish Chuankun Zhang Barbara Maria Latacz Mehmet Tuna Uysal Josephine Meyer Connor Holland	1:45 p.m.
		2:00 p.m.
		2:15 p.m.
		2:30 p.m.
		2:45 p.m.
Growing Global Startups Workshop		3:00 p.m.
		3:15 p.m.
		3:30 p.m.
		3:45 p.m.
		4:00 p.m.
		4:15 p.m.
		4:30 p.m.
		5:00 p.m.

Agenda information is also available at:
https://chicagoquantum.org/summit2025

Winners of the 2024 Boeing Quantum Creators Prize at the 2024 Chicago Quantum Summit. Clockwise from top left: Thomas Werkmeister, Sara Murciano, Senrui Chen, Patrick Ledwith, Avikar Periwal, Chengyi Luo, Hannah Manetsch, Aziza Suleymanzade, Yuxin Wang.

Boeing Quantum Creators Prize

The Boeing Quantum Creators Prize recognizes early-career researchers for work that moves the field of quantum information science and engineering in new directions.

The 51 Boeing Quantum Creators who were honored in the first four cohorts have gone on to fellowships, research scientist roles at companies such as IBM and Google Quantum AI, and faculty positions at a variety of schools, including the University of California, Berkeley; Yale University; Stanford University; New York University; the University of Illinois Urbana-Champaign; and Williams College.

The program began in 2021 and expanded in 2023 thanks to a commitment from Boeing.

2025 Boeing Quantum Creators Prize Symposium Program Co-Chairs

Alex High, University of Chicago

Angela Kou, University of Illinois Urbana-Champaign

Winners of the 2025 Boeing Quantum Creators Prize

Seokjin Bae is a postdoctoral researcher at UIUC working with Prof. Vidya Madhavan. He earned his Ph.D. from University of Maryland in Prof. Steven Anlage's group. He has developed an ultrafast scanning tunneling microscope and has been investigating ultrafast light-matter interaction at atomic scale in quantum materials.

Margarita Davydova is a Burke postdoctoral fellow at Caltech. Her recent work explores physics-inspired approaches to fault-tolerant quantum computation, quantum error correction, and robust dynamical phases of matter. Margarita earned her Ph.D. from MIT.

Uma Girish is a postdoctoral research scientist at Columbia University hosted by Prof. Henry Yuen. She received her PhD from Princeton University advised by Prof. Ran Raz. Her research focuses on the interplay between quantum computing, quantum complexity theory and the analysis of Boolean functions.

Connor Holland is a graduate student working with Lawrence Cheuk at Princeton. During his PhD, he helped develop a new quantum science platform utilizing individual polar molecules trapped in reconfigurable optical tweezer arrays. He is interested in studying how multi-level quantum systems, like molecules, can enhance near-term quantum simulators.

Guanhao Huang is an SNSF Postdoc Mobility Fellow and Aramont Fellow in Prof. Marko Lončar's group at Harvard University. His research develops ultralow-loss diamond nanomechanical platforms for quantum sensing and tabletop tests of gravity. He received his PhD in Physics from EPFL with Prof. Tobias Kippenberg.

Barbara Maria Latacz is a junior research scientist at CERN. Since 2020, she has been a member of the BASE Collaboration, working in Prof. Stefan Ulmer's group on the development of new quantum-limited technologies for measuring the antiproton magnetic moment. She completed her PhD in 2019 within the GBAR Collaboration.

Francesco Anna Mele is a PhD student at the Scuola Normale Superiore of Pisa, Italy, supervised by Vittorio Giovannetti and Ludovico Lami. His research interests include all aspects of quantum information and computation, with particular expertise in continuous-variable systems, quantum learning theory, and quantum Shannon theory.

Josephine Meyer received her Ph.D. in Physics Education Research from the University of Colorado Boulder in May 2025, specializing in the teaching and learning of quantum computing and quantum information science. She advocates globally for responsible quantum technology development and research-based Quantum 2.0 education pedagogy.

Hong Qiao is a postdoctoral researcher at the University of Chicago, where he earned his PhD in Quantum Science and Engineering under the supervision of Prof. Andrew Cleland. His research focuses on developing hybrid quantum computing platforms that integrate acoustic phonons with superconducting qubits.

Rhine Samajdar is a postdoctoral fellow at Princeton University. His research lies at the interface of quantum information science and condensed matter physics. Samajdar earned his PhD from Harvard University in 2022, working on quantum simulation with neutral atom arrays.

Mehmet Tuna Uysal is a postdoctoral researcher at MIT working with Prof. Vladan Vuletic. He received his PhD from Princeton University in Prof. Jeff Thompson's group in 2025. His work explores photonic interfaces for atomic systems and entanglement generation with solid-state qubits for quantum network applications.

Chuankun Zhang recently completed his PhD at JILA/University of Colorado, Boulder with Jun Ye, where he demonstrated quantum-state-resolved thorium-229 nuclear spectroscopy to realize a solid-state optical clock. Now an IQIM postdoc at Caltech with Andrei Faraon, he is focused on crystalline platforms for precision metrology and quantum technologies.

To learn more about the 2025 Boeing Quantum Creators, please visit:
https://chicagoquantum.org/2025BQCP

Midwest Quantum Week

Together, Illinois, Wisconsin, and Indiana are a central driver of US leadership in quantum technologies — a sector that is projected to create as many as 191,000 jobs and as much as $80 billion in economic impact for the three-state region by 2035. The inaugural Midwest Quantum Week, anchored by the Chicago Quantum Summit, is a chance to learn from and celebrate with some of the people and institutions powering this innovation ecosystem.

From a Developer Day hosted by qBraid to the Quantum Prairie Economic Symposium led by Argonne National Lab to a series of events by Purdue Northwest, Midwest Quantum Week is packed with opportunities.

Learn more and register for some of the events happening this week: **https://chicagoquantum.org/midwest-quantum-week**

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About the Chicago Quantum Exchange

The Chicago Quantum Exchange (CQE) is an intellectual hub in the Midwest that advances the science and engineering of quantum information, trains the future quantum workforce, and drives the quantum economy by connecting leading universities, national labs, and industry partners. The recipient of millions of dollars in government and corporate investment and home to some of the world's top experts in the field, the CQE community is a central driver of US leadership in quantum technologies.

The CQE is based at the University of Chicago and anchored by the US Department of Energy's Argonne National Laboratory and Fermi National Accelerator Laboratory, the University of Illinois Urbana-Champaign, the University of Wisconsin–Madison, Northwestern University, and Purdue University. Our community includes nearly 60 corporate, international, nonprofit, and regional partners and more than 210 researchers from across the Midwest. It is one of the largest collaborative teams working on quantum science in the world.

CQE Leadership

DAVID AWSCHALOM
Liew Family Professor of Molecular Engineering and Physics, University of Chicago
Senior Scientist, Argonne National Laboratory
Director, Chicago Quantum Exchange

BONNIE FLEMING
Chief Research Officer & Deputy Director of Science and Technology,
Fermi National Accelerator Laboratory
Professor of Physics, University of Chicago

SUPRATIK GUHA
Senior Scientist/Senior Advisor to Physical Sciences & Engineering,
Argonne National Laboratory
Professor of Molecular Engineering, University of Chicago

PAUL KWIAT
Professor of Physics, College of Engineering, University of Illinois Urbana-Champaign

KATE TIMMERMAN
CEO, Chicago Quantum Exchange

CQE Members

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