

Workshop on Quantum Education for Quantum Workforce Development

Sunday, January 29

6:00-8:00 PM Registration and Reception Judiciary Hall

Monday, January 30

7:45 AM Registration and Breakfast Buffet Salon B&C

8:45 AM	Beverly Sanders & Jim Freericks	University of Florida/Georgetown	Welcome
9:00 AM	Karen Jo Matsler	UT Arlington	High School Quantum: Challenges and Successes
9:30 AM	Kiera Peltz	Qubit by Qubit	What we've learned from training 20,000 students globally in QIS
10:00 AM	Mark S. Hannum	American Association of Physics Teachers	Bringing QISE to High School Students and Teachers: Challenges and Examples
10:30 AM	Break		
11:00 AM	Eric Brewwe	Drexel University	Models for teaching for the quantum workforce
11:30 AM	Megan Wawro	Virginia Tech	Student Reasoning about Linear Algebra in Quantum Mechanics
12:00 PM	Marianna Bonanome	SandboxAQ	SandboxAQ Approach Toward QIST Education
12:30 PM	Lunch Buffet		
1:30 PM	Lincoln D. Carr	Colorado School of Mines	Building a Quantum Engineering Undergraduate Program
2:00 PM	Thomas A. Searles	University of Illinois Chicago	Quantum Engineering Degree Programs for the Future National QIS Workforce
2:30 PM	Ben Zwickl	Rochester Institute of Technology	Developing and expanding an interdisciplinary QIST minor at RIT
3:00 PM	Tom Wong	National Quantum Coordination Office, Office of Science and Technology Policy, Executive Office of the President	Workforce Development in the National Quantum Initiative
3:30 PM	Break		
4:00 PM	Chandralekha Singh	University of Pittsburgh	Using research-validated learning tools to improve quantum education
4:30 PM	Liz Gire	Oregon State University	Responsiveness and Multiple Representations in Teaching Quantum Mechanics
5:00 PM	Russell R. Ceballos	University of Chicago	QuSTEAM – Breaking through the Quantum Workforce Bottleneck
5:30 PM	T.R. Robinson	University of Leicester, U.K.	Counting quanta: A radical new approach to the quantum world
6:00 PM	Dinner on your own		

Tuesday, January 31

8:00 AM Breakfast Buffet Salon B & C

9:00 AM	Timothy A. Akers	National Quantum Literacy Network	National Quantum Literacy Network: Building Quantum Literacy Awareness and Education for Diversity, Equity, Inclusion, and Accessibility to Close the Hyper-Disparity Gap in Quantum Literacy Workforce Development
9:30 AM	Mo Hasanovic	Indian River State College	Inspiring Youth to Learn about Quantum Technology through an Experiential Approach
10:00 AM	Jessica Rosenberg	George Mason University	Building a Quantum Pipeline: Preparing a Diverse Workforce for the Jobs of the Future
10:30 AM	Break		
11:00 AM	Adrian German	Indiana University Bloomington	A Bridge to Quantum STEM
11:30 AM	Heather Lewandowski	University of Colorado	Preparing undergraduate students to enter the quantum workforce through a team project experience
12:00 PM	Justyna Zwolak	NIST	At the intersection of quantum research and engineering: A practitioner's perspective
12:30 PM	Lunch Buffet		
1:30 PM	James Freericks	Georgetown University	Quantum Mechanics without Calculus: Making quantum more accessible for all
2:00 PM	Leanne Doughty	Georgetown University	Investigating students' fluency with quantum ideas in the context of interaction-free experiments
2:30 PM	Erik Deumens	University of Florida	The Physics of Quantum Error Correction
3:00 PM	Emily Edwards	University of Illinois Urbana-Champaign	Progress report on K-12 quantum education and learning framework
3:30 PM	End of workshop		