# Quantum Science and Engineering Education Conference 2023 (QSEEC23) Overview

## Sunday

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<th>Time</th>
<th>Session A1</th>
<th>LUNCH</th>
<th>Session A2</th>
<th>Session B1</th>
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<th>COFFEE BREAK</th>
<th>Poster Flash Talks</th>
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## Monday

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2nd Floor
Cedar A

Session A1
10:00 - 10:15  Opening Remarks: Marek Osinski, QSEEC23 Chair
10:15 - 11:00  Keynote: Karen Jo Matsler, "Is teaching quantum in high school crazy?"
11:00 - 11:30  Best Paper: Megan Ivory, "QCaMP: Introducing quantum computing in high schools"

11:30 - 13:00  LUNCH

Session A2  K-12
13:00 - 13:15  Derrick Tucker, "Leveraging dual enrollment programs to expand secondary education in quantum computation"
13:15 - 13:30  Nancy Holincheck, "Developing the quantum pipeline with K-12 teachers"
13:30 - 13:45  Mark Newburn, "Teaching quantum computing in K-12 Career and Technical Education (CTE)"
13:45 - 14:00  Gabbie Meis, "Qubit by Qubit: Can quantum computing be taught to middle school students?"
14:00 - 14:15  Selma Dündar-Coecke, "Quantum Picturalism: Learning quantum theory in high school"
14:15 - 14:30  Zeki Can Seskir, "Educating to the “culture” of quantum technologies: Concepts for public awareness"

14:30 - 15:00  COFFEE BREAK

Session A3  Pedagogy
15:00 - 15:15  Tunde Kushimo, "Investigating students' strength and difficulties in quantum computing"
15:15 - 15:30  Jessica Rosenberg, "Undergraduate student knowledge and interest in quantum"
15:30 - 15:45  Xiaofeng Qian, "Quantum concepts teaching facilitated with a classical optics platform"
15:45 - 16:00  Zhiding Liang, "QuCS: A lecture series on quantum computer software and system"

16:00 - 16:45  Poster Flash Talks

16:45 - 17:00  BREAK

17:00 - 18:00  Poster Session
2nd Floor
Cedar B

11:30 - 13:00  LUNCH

Session B1
13:00 - 13:15  Ran-Yu Chang, "Taiwan Student Quantum Computer Society"
13:15 - 13:30  Pablo Suárez Vieites, "How to use chatbots for learning and teaching quantum programming"
13:30 - 14:30  Tutorial 1: Dan-Adrian German & Alex Alani, "Quantum Abacus"

14:30 - 15:00  COFFEE BREAK

Session B2  Ethics and Society
15:00 - 16:00  Tutorial 2: Josephine Meyer, "Quantum Ethics"

16:00 - 17:00  BREAK

Session B3
17:00 - 18:00  Tutorial 3: Stefano Gogioso, "Quantum in Pictures"
2nd Floor
Regency C

9:30 - 10:00 COFFEE BREAK

Session C1 Outreach and Activities
10:00 - 10:30 Invited Talk: Maria Violaris, "A physics lab inside your head: Quantum thought experiments as an educational tool"
10:30 - 10:45 Mariia Mykhailova, "Teaching quantum computing using Microsoft Quantum Development Kit and Azure Quantum"
10:45 - 11:00 Ghislain Lefebvre, "Quantum computing educational tools based on the Quantum Enigmas video series"
11:00 - 11:15 Sathish Kumar, "Design of quantum machine learning course for a computer science program"
11:15 - 11:30 Richard Wolf, "A brief overview of programmed instructions for quantum software"

11:30 - 13:00 LUNCH

Session C2 Workforce Development
13:00 - 13:30 Invited Talk: Matthew Doty, "Designing and implementing a new Quantum Science and Engineering graduate degree program at t"
13:30 - 13:45 Gabbie Meis, "Building capacity for regional quantum ecosystems: A look at Cleveland, Ohio"
13:45 - 14:00 Michał Stęchły, "Voluntary mentoring initiative aimed at enhancing quantum computing abilities"
14:00 - 14:15 Oliver Bodensiek, "Concepts for upskilling the industry workforce in QT hardware"

14:30 - 15:00 COFFEE BREAK

Session C3 Education Tools
15:00 - 15:15 Addie Jordan, "QWalkVis: Quantum Walks Visualization Application"
15:15 - 15:30 Shah Ishmam Mohtashim, "Harnessing the VQE to simulate quantum chemistry in an undergraduate project: Properties of hydrogen"
15:30 - 16:00 Emil Dimitrov, "QPCC: a quantum programming course for inhomogeneous cohorts of professional learners"
16:00 - 16:15 Syed Farhan Ahmad, "Exploring architecture of Qiskit Runtime for educational enablement"
16:15 - 16:30 Ricky Young, "Utilizing automated quantum software management tools and a write-once-target-all quantum device python package"