UConn Quantum Consortium's

EDUCATION & PROMOTION

Invited Talk

A National Analysis of Quantum Information Science and Engineering Education and Workforce Needs

by Benjamin M. Zwickl and Andi R. Piña

Rochester Institute of Technology, NY



ONLINE ON MICROSOFT TEAMS

Thursday 17th July 2025 2:30-4:00 pm EDT

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A National Analysis of Quantum Information Science and Engineering Education and Workforce Needs

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ABSTRACT

Quantum information science and engineering (QISE) is a national priority, which has led to rapid growth in educational opportunities and hiring. There is a need to better understand the educational opportunities and workforce needs in order to strategically improve and expand QISE education. Part one of the presentation will overview the landscape of courses and programs related to quantum generally and QISE. We will look at trends across disciplines, education levels, and institution types. Part two of the presentation will combine data from several studies, some by our group and some by others, that have used job postings, surveys of employers, and interviews with industry professionals to understand how the availability of jobs differs by level and disciplinary background, while also drilling deeper into the knowledge, skills, and workplace tasks that are especially important for QISE employers.