

SIAM Quantum Intersections Convening

Integrating Mathematical Scientists
into Quantum Research

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Chief Executive Officer, SIAM

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- Advance the application of mathematics and computational science to engineering, industry, science, and society,
- Promote research that will lead to effective new mathematical and computational methods and techniques for science, engineering, industry, and society,
- Provide media for the exchange of information and ideas among mathematicians, engineers, and scientists,
- Be a source of information for both public and private agencies regarding the state of the fields.

Convening Steering Committee

Di Fang, Duke University

Lior Horesh, IBM Research

David Hyde, Vanderbilt University

Annie Imperatrice, SIAM

Jeffrey Larson, Argonne National Laboratory

Bashir Mohammed, Intel Corporation

Giacomo Nannicini, University of Southern California

Alex Pothen, Purdue University

Suzanne Weekes, SIAM



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KNOWINNOVATION

Annemarie Boss, Tim Dunne

Quantum Intersections Convening Goals

- make more mathematical scientists aware of the demand for their expertise in quantum research and articulating areas and problems where they can contribute,
- increase the participation of researchers in mathematical sciences in the quantum information science revolution to accelerate its research and development,
- provide a seeding ground for partnerships and collaborations of mathematical scientists with physicists, computer scientists, and engineers from industry and academia, and
- recommend activities to develop a quantum science and technology workforce pipeline in the mathematical and computational sciences.

Convening Presenters

Marcos Crichigno, Phasecraft US

Alex Dalzell, AWS Center for Quantum
Computing

Bert de Jong, Lawrence Berkeley National
Laboratory

Emily Edwards, Duke University

Kirk Jordan, IBM Research Emeritus

Mariam Kiran, Oak Ridge National Laboratory

Qipeng Liu, University of California, San Diego

Michael A. Perlin, Global Technology Applied
Research, JPMorganChase

Miriam M. Quintal, Lewis-Burke Associates, LLC

Saif Rayyan, IBM Research

Angela Robinson, National Institute of
Standards and Technology (NIST)

Ruslan Shaydulin, JPMorganChase

Kate Smith, Northwestern University

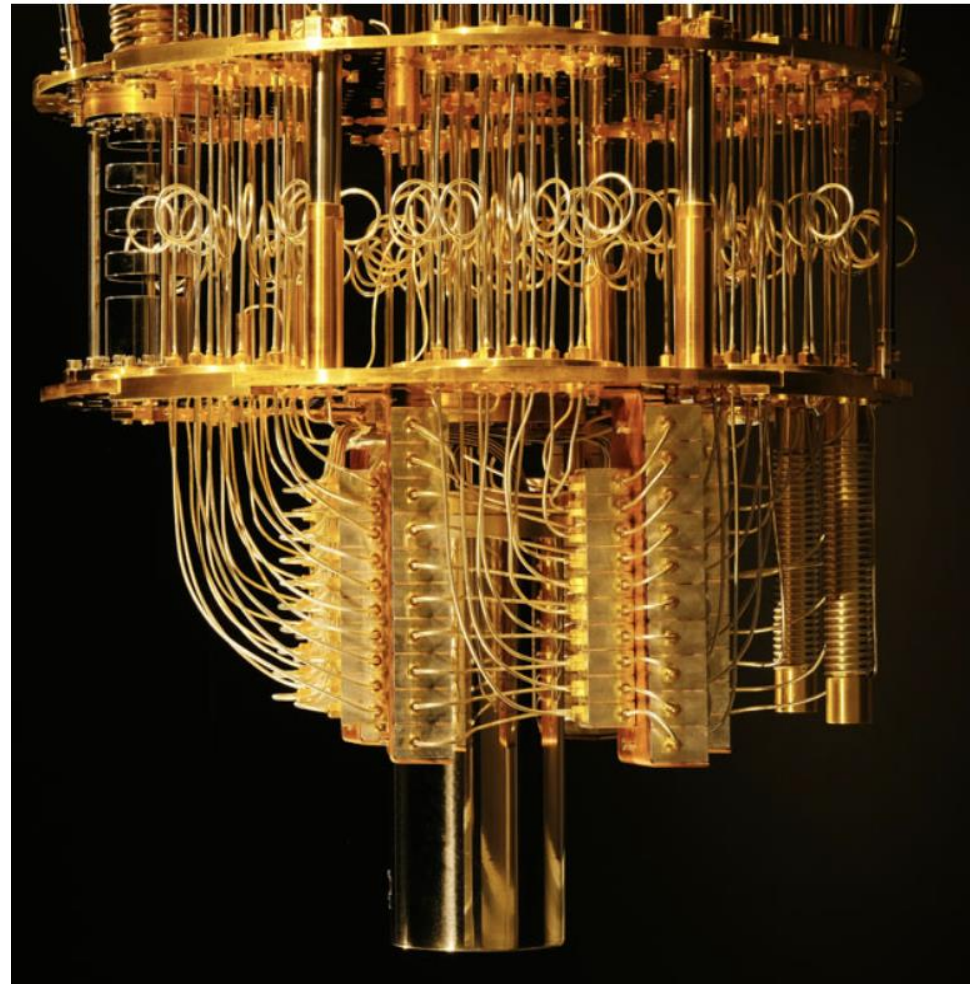
Jacob Taylor, NIST

James D. Whitfield, Dartmouth College, AWS

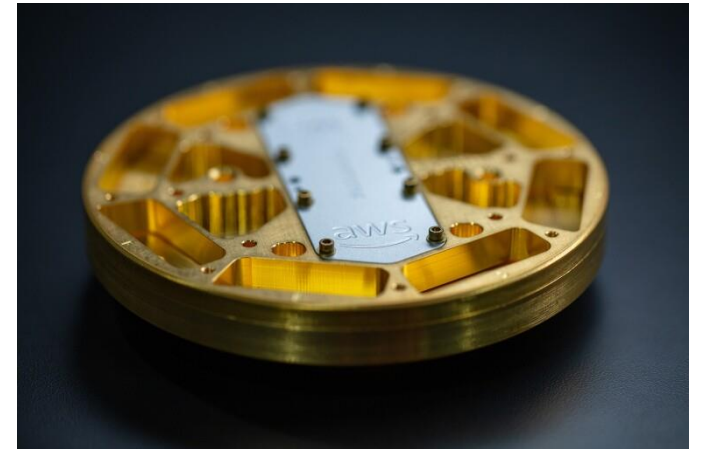
Thank you!



Courtesy of the University of California,
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From IBM - *Quantum computers and accelerated discovery*



From aboutAmazon.com - A microwave
package encloses the quantum processor.
The packaging is designed to shield the
qubits from noise while enabling
communication with the control system.



Dr. David Mandersheid, Division Director of Mathematical Sciences (DMS)



Dr. Junping Wang, Deputy Division Director of Mathematical Sciences (DMS)