

The *Mathematical Sciences Research Institute* and the *American Mathematical Society*

Cordially invite you to a lunch briefing on Capitol Hill entitled

# “No Longer Secure: Cryptography in the Quantum Era”

THURSDAY  
DECEMBER 5, 2019  
12:00 PM – 1:30 PM

Russell Senate Office Building, Room 385

Advances in quantum computing threaten existing secure systems that support national and economic security, necessitating new cryptographic protocols. Mathematicians are working to stay ahead of the curve, while

NIST and other government research agencies are paying close attention. The future of secure communications is at stake.

Cryptography researcher Jill Pipher will trace the impact of modern cryptography on network security, cybersecurity, financial transactions, private communications, and digital currencies. She will outline threats and opportunities in the quickly changing and increasingly complex environment at the beginning of the quantum era.

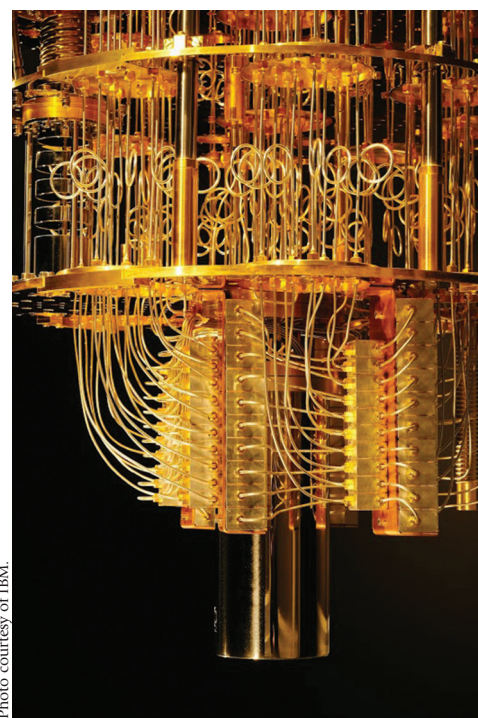


Photo courtesy of IBM.

The National Science Foundation (NSF) provides the majority of funding for the basic research necessary to unlock the enormous potential applications of the mathematical sciences. AMS and MSRI appreciate the NSF's far-sighted commitment to this investment.



Photo courtesy of Nick Dentanero, Brown University.

## Jill Pipher

President,  
American Mathematical Society,  
Vice President for Research and  
Elisha Benjamin Andrews Professor of  
Mathematics, Brown University

Please RSVP  
by November 20th  
to [arw@ams.org](mailto:arw@ams.org)

Lunch will be served.  
Space is limited at this widely  
attended public event.