Event: The White House Summit on Advancing American Leadership in Quantum Information Science

Event Date: Monday, September 24, 2018

About: A century ago, the quantum revolution quietly began to change our lives. A new understanding of the behavior of matter and light at atomic and subatomic scales sparked a new field of science that would vastly change the world's technology landscape. Today, we rely upon the science of quantum mechanics for applications ranging from the global positioning system to magnetic resonance imaging to the transistor. The advent of quantum computers presages yet another new chapter in this story that will enable us to predict and improve chemical reactions, new materials and their properties, as well as provide new understandings of spacetime and the emergence of our universe. Remarkably, this progress may be realized within a decade.

From initial steps in the 1980s to today, science and defense agencies in the U.S. and around the world have supported basic research in quantum information science (QIS) to develop advanced sensing, communication, and computation systems. This event will convene top QIS experts from academia, industry, and government to discuss how the U.S. can maintain leadership role in QIS and build the necessary people, science, and technology to realize the potential impact of this field for our Nation. Primary discussion topics will include:

- Science of QIS: The 10-Year Horizon
- Developing a Quantum-Smart Workforce
- Building Out Key QIS Infrastructure & Support
- Expanding Opportunities With the Global QIS Community

In addition to the startups that are developing these technologies and their novel applications, we will be bringing in industry leaders to talk about how their businesses are adopting and adapting to new QIS technologies. While every major industry could have its own summit on this topic, this event will focus on four sectors:

- Supply Chain Providers
- Quantum Computing Companies and Startups
- Venture and Investment Firms
- End Users
    - Big Data and Machine Learning
    - Operations Research
    - Chemistry and Materials Science
    - Financial and Tech

The White House Summit on Advancing American Leadership in QIS
Eisenhower Executive Office Building
Monday, September 24, 2018 | 12:00PM – 5:15 PM

Arrival
12:00PM – 1:00PM

Opening Remarks
1:00PM – 1:45PM

Speaker: Michael Kratsios (OSTP)

Speakers: NSF, DOE, NIST, DOD

Breakout Sessions I **1:55PM – 2:55PM**

- **Science of QIS: The 10-Year Horizon**
  Facilitators: France Córdova, NSF
- **Advancing QIS Public-Private Coordination**
  Facilitators: Jake Taylor, OSTP
- **Developing a Quantum-Smart Workforce**
  Facilitators: Laurie Locascio, UMD
- **Balancing Growth & Security in the Competitive QIS Landscape**
  Facilitators: Mike Griffin, DOD

Break
3:05PM – 3:40PM

Breakout Sessions II **3:50PM – 4:50PM**

- **Expanding Opportunities With the Global QIS Community**
  Facilitators: Johnathan Margolis, State
- **Removing Barriers to QIS Innovation**
  Facilitators: Walt Copan, NIST
- **Inspiring the Next Quantum Generation**
  Facilitators: Jeff Weld, OSTP
- **Building Out Key QIS Infrastructure & Support**
  Facilitators: Paul Dabbar, DOE

Closing Remarks
5:00PM – 5:15PM

Speaker: U.S. Rep. Lamar Smith (R-TX), Chairman, House Science, Space, and Technology Committee

ATTENDEES

Federal

- Alison Appling, Department of the Interior
- Julie Bentz, National Security Council
- Steve Binkley, Department of Energy
- Gerald M. Borsuk, Department of Defense
- Missye Brickell, U.S. Senate Committee on Commerce, Science, and Transportation
- Alicia Brown, U.S. Senate committee on Commerce, Science, and Transportation
- Pat Carrick, Department of Homeland Security
- George Coker, National Security Agency
- Walt Copan, National Institute of Standards and Technology
- France Córdova, National Science Foundation
- Paul Dabbar, Department of Energy
- Stacey Dixon, Intelligence Advanced Research Projects Activity
- Emily Domenech, U.S. House Committee on Science, Space, and Technology
- Mike Griffin, Department of Defense
- Michael Hayduk, Department of Defense
- Gil Herrera, Sandia National Laboratories
- Jim Herz, Office of Management and Budget
- David Honey, Defense Advanced Research Projects Agency
- Travis Humble, Oak Ridge National Lab
- Anne Kinney, National Science Foundation
- Michael Kratsios, Office of Science and Technology Policy
- John Levock-Spindle, Office of Management and Budget
- Simon Liu, Department of Agriculture
- Joseph Lykken, Fermi National Accelerator Laboratory
- Jonathan Margolis, Department of State
- Scott McKee, U.S. Senate Committee on Energy and Natural Resources
- Kirsten Mortimer, Bureau of Industry and Security
- Sara Moxley, U.S. House Committee on Oversight and Government Reform
- Mitch Nikolich, Department of Defense
- Philip Perconti, Department of Defense
- Ben Reinke, U.S. Senate Committee on Energy and Natural Resources
- Adam Rosenberg, U.S. House Committee on Science, Space, and Technology
- Anna Scherbina, Council of Economic Advisors
- Gail Slater, National Economic Council
- Charlie Tahan, National Security Agency
- Jake Taylor, Office of Science and Technology Policy
- Douglas Terrier, National Aeronautics and Space Administration
- Carl Williams, National Institute of Standards and Technology
- Mike Witherell, Lawrence Berkeley National Lab

Non-Federal

- Parney Albright, HRL Laboratories
- Dana Anderson, ColdQuanta
- Patrick Antkowiak, Northrop Grumman
- Asha Balakrishnan, Science and Technology Policy Institute
- Lauren Bartels, Science and Technology Policy Institute
- Lori Beer, JPMorgan Chase & Co.
- Jim Clarke, Intel
- Thomas Colvin, Science and Technology Policy Institute
- Keith Crane, Science and Technology Policy Institute
- Satish Dhanasekaran, Keysight Technologies
- John Donovan, AT&T Communications
- Andre Fuetsch, AT&T Labs
- Dario Gil, IBM
- Ernie Glover, Moore Foundation
- Rod Hall, Goldman Sachs
- Todd Holmdahl, Microsoft
- Bill Jeffrey, SRI International
- Mark Kasevich, AOSense
- Bindu Madhavan, SAP
- Sean Maguire, Google Ventures
- Rod Makoske, Lockheed Martin
- Chris Martin, Kavli Foundation
- Betsy Masiello, Rigetti Computing
- Luke Mauritsen, Montana Instruments
- Oleg Mukhanov, Hypres
- Hartmut Neven, Google
- Vijay Pande, Andreessen Horowitz
- Greg Quarles, The Optical Society
- Anjan Reijnders, Montana Instruments
- Chad Rigetti, Rigetti Computing
- Kent Rochford, SPIE
- Robert Rozansky, Science and Technology Policy Institute
- Peter Salovey, Yale University
- Christopher Savoie, Zapata Computing
- Rob Schoelkopf, Quantum Circuits Inc.
- David Steuerman, Kavli Foundation
- Tony Uttley, Honeywell
- Ed White, National Photonics Initiative

Academia

- David Awschalom, University of Chicago
- Lawrence Carin, Duke University

- David Conover, University of Oregon
- Robert Cunningham, Carnegie Mellon University
- Juan de Pablo, University of Chicago
- Brian DeMarco, University of Illinois, Urbana-Champaign
- Tomás Díaz de la Rubia, Purdue University
- Mark Eriksson, University of Wisconsin-Madison
- Roger Falcone, University of California, Berkeley
- Steve Girvin, Yale University
- David Gross, University of California, Santa Barbara
- Wolfgang Ketterle, Massachusetts Institute of Technology
- Jungsang Kim, Duke University
- Peter Knight, Imperial College London
- Raymond Laflamme, Institute for Quantum Computing
- Laurie Locascio, University of Maryland
- Mikhail Lukin, Harvard University
- Juan Maldecena, Princeton Unversity
- Margaret Martonosi, Princeton Unversity
- Richard McCullough, Harvard University
- Kathryn Moler, Stanford University
- Chris Monroe, University of Maryland
- John Preskill, California Institute of Technology
- Ana Maria Rey, University of Colorado
- Ed Seidel, University of Illinois, Urbana-Champaign
- Peter Shor, Massachusetts Institute of Technology
- Michelle Simmons, University of New South Wales
- Maria Spiropulu, California Institute of Technology
- Umesh Vazirani, University of California, Berkeley
- James Whitfield, Dartmouth University
- Dave Wineland, University of Oregon
- Peter Zoller, University of Innsbuck