

The National Quantum Initiative

Gretchen Campbell

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Biography

Gretchen Campbell is the Deputy Director for the National Quantum Coordination Office at the White House Office of Science and Technology Policy, where she helps coordinate QIS programs across the Federal Government. Campbell is on detail from the National Institute of Standards and Technology (NIST), where she is the co-director of the Joint Quantum Institute, a joint institute between the University of Maryland and NIST, and the Group Leader for the Laser Cooling and Trapping group in the Quantum Measurement Division at NIST. She is also an Adjunct Professor in the Department of Physics at the University of Maryland. Dr. Campbell received a B.A. in Physics from Wellesley College in 2001 and received her Ph.D. from MIT in 2007. From 2007-2009, she was a NRC postdoctoral fellow at JILA and NIST in Boulder, Colorado. Dr. Campbell's research has included a wide range of experimental work in the field of ultracold atomic gases. She is a fellow of the American Physical Society. Her awards include the Arthur Flemming Award (2012); the Presidential Early Career Award in Science and Engineering (2012); the Sigma Xi Katherine Blodgett Gebbie Young Scientist Award (2013); the APS Maria Goeppert Mayer Award (2015), and the IUPAP C15 Young Scientist Prize (2015). She was also a Finalist for the Samuel J. Heyman Service to America Medals, Call to Service category (2015).

Abstract

In 2018, the United States launched the National Quantum Initiative (NQI) to accelerate research and development (R&D) in quantum information

science (QIS) within the United States. Since then, the U.S. has been advancing QIS by getting the science right, enhancing competitiveness, and enabling people. For science, the NQI Act authorized U.S. Federal departments and agencies to establish centers to address the most pressing scientific frontiers in QIS. To enhance competitiveness, the U.S. has engaged industry and international partners to drive QIS technology development toward useful applications, while also protecting national security. To enable people, the U.S. is building the QIS workforce and conducting outreach to create new opportunities.