

Quantum Horizons: QIS Research and Innovation for Nuclear Science
List of Awards 2019-2020

PI Name	Institution	Proposal Title	State	9-digit Zip Code
David Leibbrandt	University of Colorado	Quantum-enabled precision measurements of the ^{229}Th nuclear isomer transition	Colorado	80309-1058
Paulo Bedaque	University of Maryland	Approaching QCD with Quantum Simulators and Quantum Computers	Maryland	20742-5141
Morten Hjorth Jensen	Michigan State University	From Quarks to Stars; A Quantum Computing Approach to the Nuclear Many-Body Problem	Michigan	48824-2601
Joseph Formaggio Collaborative	Massachusetts Institute of Technology	Josephson Traveling Wave Parametric Amplifiers to Enable Future Neutrino Mass Measurements	Massachusetts	02139-4307
Brent Vandevender Collaborative	Pacific Northwest National Laboratory	Josephson Traveling Wave Parametric Amplifiers to Enable Future Neutrino Mass Measurements	Washington	99352-0000

Joel Ullom Collaborative	University of Colorado	Using Quantum Sensors to Probe the Quasiparticle Excess in Quantum Circuits due to Ionizing Radiation	Colorado	80309-1058
Brent Vandevender Collaborative	Pacific Northwest National Laboratory	Using Quantum Sensors to Probe the Quasiparticle Excess in Quantum Circuits due to Ionizing Radiation	Washington	99352-0000
Ian Cloet	Argonne National Laboratory	A Pathfinder for Nuclear Physics Quantum Simulation	Illinois	60439-4803
Valentine Novostad	Argonne National Laboratory	Superconducting Quantum Detectors for Nuclear Physics and QIS	Illinois	60439-4803
Martin Savage	University of Washington	InQubator for Quantum Simulations of Quantum Systems (IQuS2)	Washington	98195-5852
Walker-Loud, Andre	Lawrence Berkeley National Laboratory	Connecting Quantum Chromodynamics to Nuclear Physics with Adiabatic Quantum Computing	California	94720-8099
Jason Harke	Lawrence Livermore National Laboratory	Project Mjolnir - Search for the Thorium-229 isomer	California	94551-0808

William Oliver Collaborative	Massachusetts Institute of Technology	Exploring the Effects of Environmental Radiation on Superconducting Qubit Coherence	Massachusetts	02139-4307
Brent Vandevender Collaborative	Pacific Northwest National Laboratory	Exploring the Effects of Environmental Radiation on Superconducting Qubit Coherence	Washington	99352-0000
Sofia Quaglioni	Lawrence Livermore National Laborator	Near-Term Quantum Simulations for Nuclear Physics	California	94551-0808
Yong Chen	Purdue University	Applications of quantum materials in nuclear physics experiments	Indiana	47907-2114
Gautam Rupak	Mississippi State University, Mississippi State, Mississippi	Nuclear Structure on a Quantum Computer	Mississippi	39762-6156
Bischof, Michael Early Career Award	Argonne National Laboratory (ANL), Lemont, IL	A neutral-atom quantum simulator for nuclear physics	Illinois	60439-4803
Joo, Kyungseon	University of Connecticut	Workshop on Nuclear Physics and Quantum Information Science	Connecticut	06269-1133
Robert Edwards	Thomas Jefferson National Accelerator Laboratory	Coordinated Mini-Lecture Series on Quantum Computing and Quantum Information Science for Nuclear Physics	Virginia	23606-4468

