THE UNIVERSITY OF NEW MEXICO

From: Faculty Research Development Office
Office of the Vice President for Research

Subject: Limited Competition: DOE Accelerated Research in Quantum Computing (ARQC) DE-FOA-0002081

Date: April 9, 2019

UNM Researchers,

The DOE SC program in Advanced Scientific Computing Research (ASCR) hereby announces its interest in receiving applications from large multi-disciplinary teams (requesting support of more than $2 million per year) with the potential to dramatically accelerate research in quantum computing (QC). This FOA solicits applications for Accelerated Research in Quantum Computing (ARQC) Teams that will adopt a holistic and disciplined approach to address basic research gaps in the abstractions, methods and tools that connect QC applications to hardware.

The proposed Teams are expected to be comprised of QIS experts who were not traditionally supported by ASCR along with applied mathematicians and computer scientists who may have a record of funding from ASCR but not necessarily with expertise in QIS. It is therefore essential for ARQC Teams to have a well-defined approach to create effective synergies among team members who represent starkly different communities unaccustomed to working together.

Complete program details can be found at: https://science.energy.gov/ascr/funding-opportunities/. Required letter of intent is due on May 1, 2019 and full proposals are due May 31, 2019.

This is a limited competition. Each institution is limited to one proposal.

If you are interested in submitting a preproposal, you *must* submit a statement of interest to limited@unm.edu by noon, Monday, April 15, 2019 that includes: a tentative project title, a brief description of the objectives and technical approach of the proposed research, the names and institutional affiliations of the team members as well as any committed collaborating partners.

Following this statement of interest, a **2-page pre-proposal addressing the required elements below is due by noon Tuesday, April 23, 2019** via e-mail to limited@unm.edu **with the subject line: DOE ARQC – your name**. The preproposal shall include the following: 1) the objectives of the project and the potential impact (i.e., benefits, outcomes.); 2) a description of the project and how the proposed ARQC Team will develop and support basic research foundations in quantum algorithms and quantum computer science; 3) identify the hypotheses to be tested (if any) and details of the methods to be used including the integration of experiments with theoretical and computational research efforts.

Please distribute this notice to departments and individuals whom you believe would be interested.

If you are affiliated with HSC, please contact Corey Ford (CFord@salud.unm.edu) or Cassandra Misenar (CMisenar@salud.unm.edu) for more information.