

TO: Faculty  
From: Office of Research and Sponsored Programs  
Subject: Limited Competition: Physics Frontiers Centers (PFC) NSF 19-578  
Date: Friday, July 5, 2019

The Physics Frontiers Centers (PFC) program supports university-based centers and institutes where the collective efforts of a larger group of individuals can enable transformational advances in the most promising research areas. The program is designed to foster major breakthroughs at the intellectual frontiers of physics by providing needed resources such as combinations of talents, skills, disciplines, and/or specialized infrastructure, not usually available to individual investigators or small groups, in an environment in which the collective efforts of the larger group can be shown to be seminal to promoting significant progress in the science and the education of students. Activities supported through the program are in all sub-fields of physics within the purview of the

Division of Physics: atomic, molecular, optical, plasma, elementary particle, nuclear, particle astro-, gravitational, and biological physics. Interdisciplinary projects at the interface between these physics areas and other disciplines and physics sub-fields may also be considered, although the bulk of the effort must fall within one of those areas within the purview of the Division of Physics. The successful PFC activity will demonstrate: (1) the potential for a profound advance in physics; (2) creative, substantive activities aimed at enhancing education, diversity, and public outreach; (3) potential for broader impacts, e.g., impacts on other field(s) and benefits to society; (4) a synergy or value-added rationale that justifies a center- or institute-like approach.

Individual PFC awards are expected to range in size between \$1.0 million/year and \$5.0 million/year. The number of awards in FY 2020 is expected to be in the range 3-5. Awards will be made for five years, with an option for a one-year extension. More details can be found at <https://www.nsf.gov/pubs/2019/nsf19578/nsf19578.htm>. The deadline for required preliminary proposals to the agency is August 01, 2019. Full proposals are by invitation only and are due January 30, 2020.

**No more than two preliminary proposals may be submitted by any one institution. Please submit your 3-page preproposal (plus budget and CV; all documents in a SINGLE PDF file, 11 point font) by NOON on Friday, July 19<sup>th</sup>, 2019 to [research@unco.edu](mailto:research@unco.edu) with the subject line indicating: NSF-PFC - your name. No late submissions will be considered.**

The pre-proposal should address the major points that will be included in the preliminary proposal narrative (including: a list of the PI, any co-PIs and each participating senior investigator (faculty level and equivalent) by full name, and institutional affiliation; overview of the PFC project as a whole, including a rationale for establishing the PFC, and an outline of the existing and planned capabilities of the participating institutions in physics research and education; description of each Major Activity (MA) (a Major Activity is usually a primary research thrust, but may also be a large-scale effort in workshop organization or comparable community-building effort.); proposed collaborations with industry and/or other sectors.) The narrative should be accompanied by a draft budget overview and an abbreviated PI CV.

If you have questions, please contact [chris.saxton@unco.edu](mailto:chris.saxton@unco.edu)