



To: Distribution List

From: Faculty Research Development Office (FRDO)  
Office of the Vice President for Research

Subject: Limited Competition: NSF, Physics Frontiers Centers (PFC), NSF 22-592

Date: 5/12/2022

Dear UNM Researchers,

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 areas and other disciplines/physics sub-fields may also be considered. 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; and 4) a synergy or value-added rationale that justifies a center- or institute-like approach.

The estimated number of awards is 3-5 with awards ranging from \$6-8M. Cost sharing is prohibited. Indirect Costs carry no limitations. Proposed duration is 72 months. In addition to Intellectual Merit and Broader Impacts, a major deciding factor in determining whether an activity qualifies for PFC funding is the **synergy and value added that justifies center-scale support**. Complete details can be found at <https://www.nsf.gov/pubs/2022/nsf22592/nsf22592.htm?org=NSF>. The deadline for preliminary proposals to the agency is 5pm MDT August 1, 2022. The agency deadline for full proposals, **which are by invitation only**, is 5pm MST January 27, 2023.

This is a limited competition. **Each institution is limited to TWO preliminary proposals**. Please submit your 200-word statement of interest by **NOON on Wednesday, June 8, 2022** via UNM's [InfoReady Review portal](#). No late submissions will be considered.

The statement of interest should address the major points that will be included in the preliminary proposal narrative. The main characteristics of a PFC-supported unit will have some or all of the following characteristics of successful units of similar size and complexity in physics and other fields. In no particular order, these are: 1) combining talent, skills, or facilities required for a major advance in physics;

2) combining groups, departments, institutions, etc. required to make a major advance in physics; 3) providing critical mass or specialized infrastructure needed for an advance by the unit, and often the broader field; 4) providing the context and/or organization to bring together leaders and students to initiate work in a promising new area, a new interdisciplinary field, an important application, or a new facility of strategic importance to physics; 5) fostering field-wide exploration of frontier research within the community at large; 6) making available specialized infrastructure to others; and 7) creating innovative projects to promote education, the participation of traditionally underrepresented groups in science, and public outreach using the center as a focal point.

Should you have any questions please feel free to contact us at [limited@unm.edu](mailto:limited@unm.edu).

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