Update from NSF

Keith R. Dienes, Ph.D.
Program Director, Physics Section
Directorate for Mathematical and Physical Sciences
May 22, 2026

This talk

- Basic facts about NSF
- Major changes during 2025-2026
- Specific updates from Programs relevant for DNP and DPF

Disclaimer: Many of these slides come from other sources within NSF.
No Program Directors were injured during the preparation of these slides,
nor was AI involved. (As for BI, you can be the judge…)

HISTORY

An independent federal agency created by Congress in 1950
by the National Science Foundation Act of 1950.

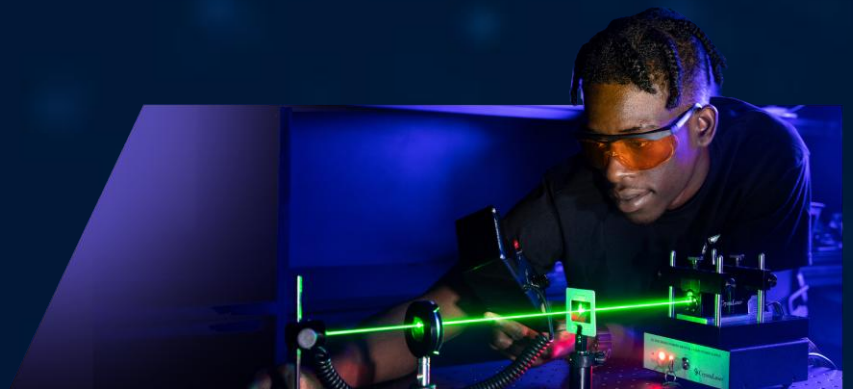
The only federal agency whose mission includes support for research and education in all fields of fundamental science and engineering.

MISSION

PROMOTE
the progress of science

ADVANCE
the national health, prosperity, and welfare

SECURE
the national defense



NSF supports all areas of science including:

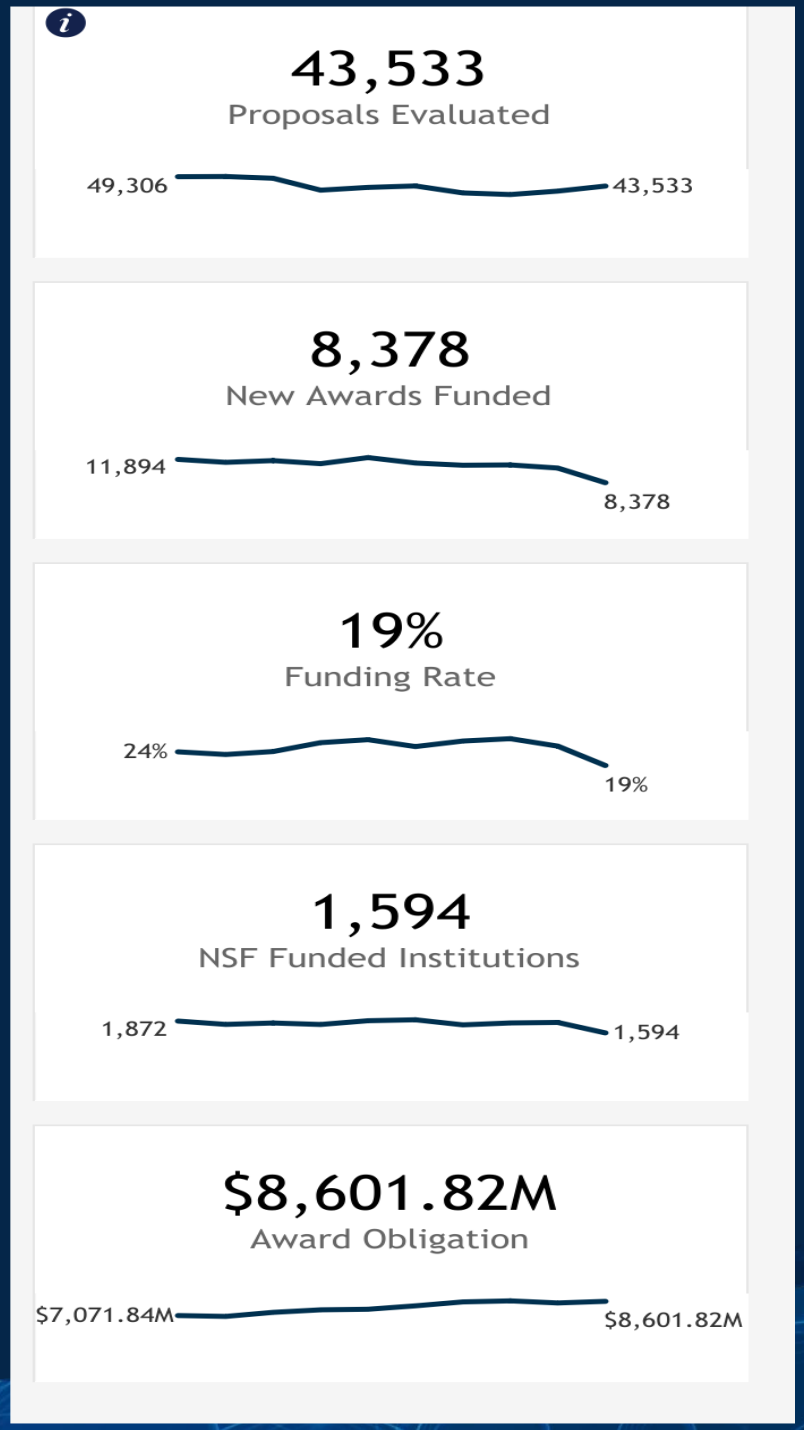
- Biological Sciences (NSF BIO)
- Computing and Information Science And Engineering (NSF CISE)
- Engineering (NSF ENG)
- Geosciences (NSF GEO)
- Mathematical and Physical Sciences (NSF MPS)
- Social, Behavioral and Economic Sciences (NSF SBE)
- STEM Education (NSF EDU)
- Technology, Innovation and Partnerships (NSF TIP)

Huge Impact

NSF reaches into every state and territory to support all areas of science and engineering

NSF By the Numbers: Trends 2016-2025

Note: These numbers are for NSF as a whole. Trends for physics (and, in particular, for nuclear and particle physics) may be very different….



Lots of changes at NSF

- Fewer personnel at all levels of organization
- Fewer advisory committees
- New headquarters
- Internal reorganization --- no more Divisions
- Funding changes: Shifts in funding modalities and priority areas

Let’s discuss each of these in turn…

Fewer personnel

- Many retirement offers accepted
- Many IPAs (rotators) reached their end dates
- Agency-wide (govt-wide) hiring freeze

- *New development*: NSF is (slowly) hiring again!
  (*More about this later…*)

Fewer advisory/oversight committees

- Committees of Visitors
- HEPAP and NSAC
- MPSAC
- National Science Board

- Proposal review panels continue as always but almost all are virtual

NSF on the move

- In 2025, our NSF building in Alexandria was re-assigned to HUD.
- We therefore vacated our building in mid-December 2025.
- Meanwhile, a new location has been secured for us on the USPTO campus. (USPTO= U.S. Patent and Trademark Office)
- Unfortunately, our new building is not “ready” --- needs to be updated (offices, furniture, etc…)
- Since December 2025, NSF has therefore been “homeless” and NSF staff are all teleworking
- Move-in date: perhaps late summer? Early fall?

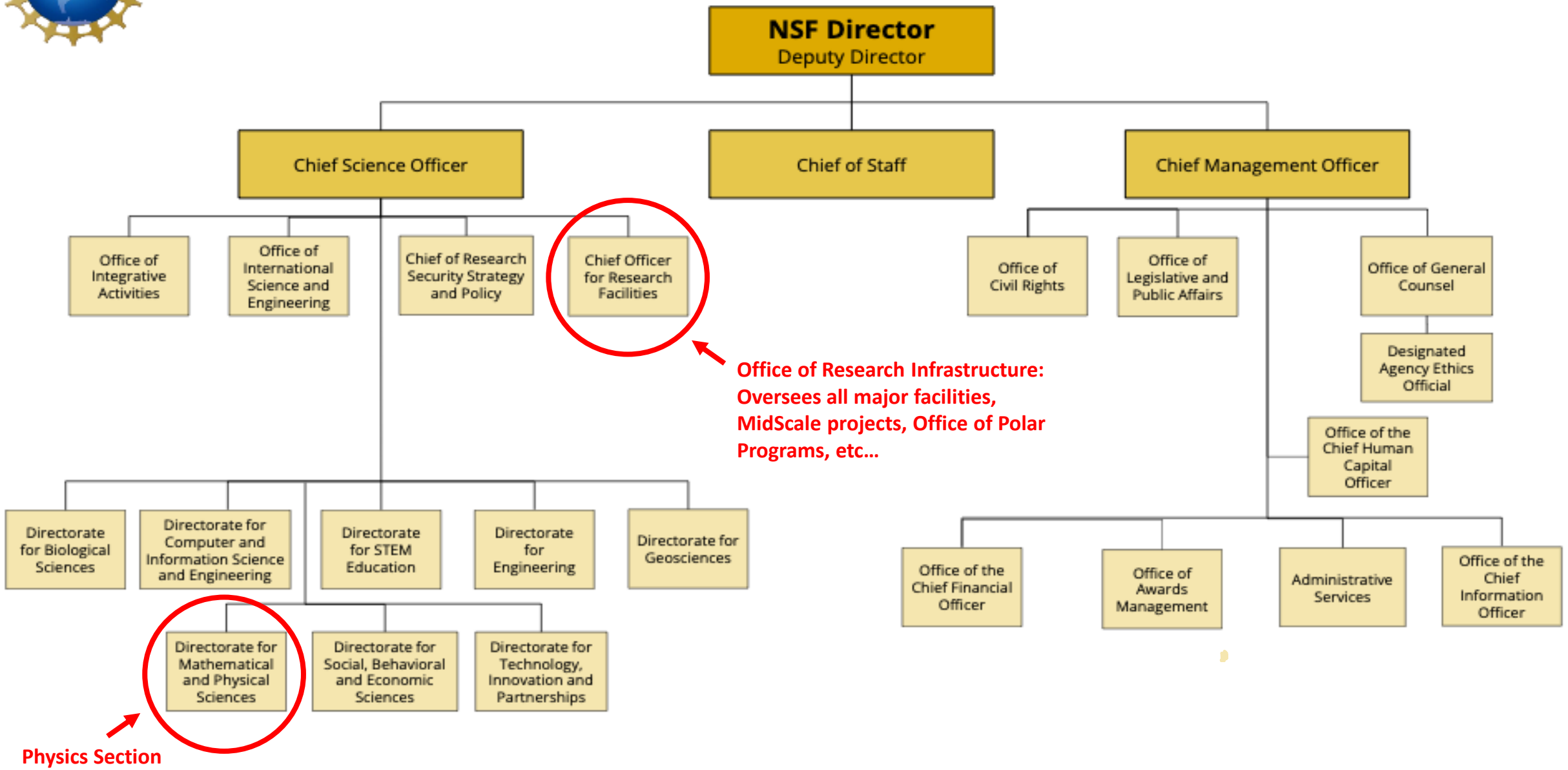

Fortunately, NSF is not moving very far…
King St. Metro Stop
Old Town
Old Town Alexandria
Duke St
Stoneside Blinds & Shades Alexandria
PLNT Burger
Carlyle Dog Park
John Carlyle Square Park
Wegmans
YogaSix South Alexandria
Minuteman Press
NSF
Potbelly Sandwich Shop
Residence Inn by Marriott Alexandria Old Town South at Carlyle
Bad Ass Coffee of Hawaii
Rus Uz - Alexandria
Dulany St
Ballenger Ave
Sweet Fire Donna's
USPTO campus
NSF
Bridge First Insurance
Orangetheory Fitness
Eisenhower Ave
Eisenhower Ave. Metro stop
300 ft
Our new address:
401 Dulany Street
Randolph Building
Alexandria, VA 22314

Internal reorganization

- No more Divisions!
- Replaced by Sections, not always a one-to-one map
- Significant changes at upper levels…

U.S. National Science Foundation

12/14/2025 organizational structure



For Physics, the chain of command is largely intact…

MPS Assistant Director
David Berkowitz
MPS Deputy Assistant Director
Tie Luo

Physics Division Director
Saul Gonzalez
Deputy Division Director
Mike Cavagnero

Physics Program Directors
running the Core Programs

MPS Directorate Head
Tie Luo

MPS Deputy Directorate Head
Saul Gonzalez

Physics Section Head
Mike Cavagnero

Physics Program Directors
running the Core Programs

Our administrative support staff have been centralized across MPS.

Moreover, *within* the Sections…

- Some programs have been merged/ consolidated
- New (and fewer) Solicitations (NOFOs) are being issued
- Deadlines have been changed to Target Dates
- Within the Physics Section, many of these Target Dates for FY27 have shifted significantly from previous norms

If planning a proposal for FY27, be vigilant! Keep your eye on the website for new Solicitation and Target Dates.

Funding changes (2025, 2026)

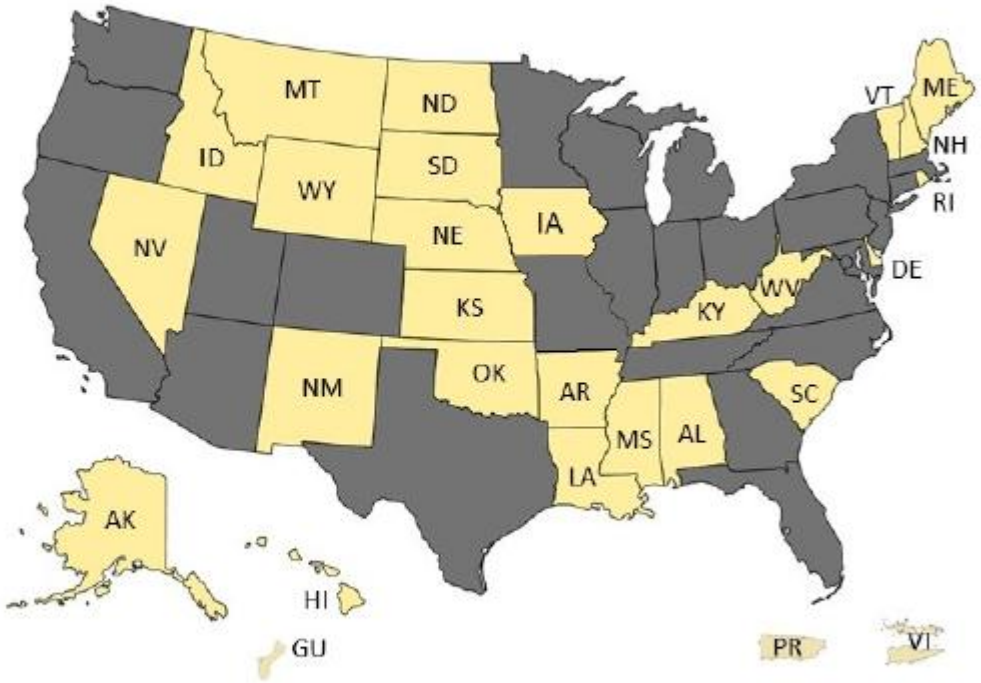
1. Agency-wide directive to minimize/eliminate out-year commitments
   - Existing grants: "Pay off" all commitments (2nd and 3rd year installments)
   - New grants: Provide *all* funding for *entire* grant at inception

   While causing a major perturbation in our available funding for new grants, this is only a transient effect if all other budgetary factors remain unchanged.

2. Significant funding targets established for Administration and NSF "priority areas"
   - **AI/ML**
   - **QIS**
   - Advanced Manufacturing/ Microelectronics/ Semiconductors
   - Biotechnology
   - **EPSCoR**

NSF EPSCoR FY23 Eligibility

Still valid in FY26



States

AL Alabama
AK Alaska
AR Arkansas
DE Delaware
HI Hawaii
IA Iowa
ID Idaho
KS Kansas
KY Kentucky
LA Louisiana
ME Maine
MS Mississippi
MT Montana
NE Nebraska
NH New Hampshire
NM New Mexico
ND North Dakota
NV Nevada
OK Oklahoma
RI Rhode Island
SC South Carolina
SD South Dakota
VT Vermont
WV West Virginia
WY Wyoming

Other

GU Guam
PR Puerto Rico
VI U.S. Virgin Islands

- States, Commonwealths, and Territories are eligible for funding if their most recent 5-year level of total NSF funding is equal to or less than 0.75% of the total NSF budget.

These targets and priority areas can have a significant effect on the remaining funding available for “blue sky” research

PIs who are able to emphasize/ maximize the overlaps between their research and these priority areas may encounter enhanced funding opportunities.

The Physics Section has 12 “core” programs…

- AMO – Experiment
- AMO – Theory
- EPP – Experiment
- EPP, Particle Astrophysics, and Cosmology – Theory
- Gravitational Physics
- Integrative Activities in Physics (REUs, …)
- Nuclear Physics – Experiment
- Nuclear Experiment – Theory
- Particle Astrophysics – Experiment
- Physics of Living Systems
- Plasma Physics
- Quantum Information Science

… and 3 “cross-cutting” programs

- Advanced Physics Instrumentation
- Focused Research Hubs in Theoretical Physics
- Physics at the Information Frontier

\+ Physics Frontier Centers, IAIFI, …

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Directly relevant for DPF and DNP

… and 3 “cross-cutting” programs

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Updates from relevant Core Programs

Particle Physics -- Experiment: 2025-2026

- LHC Ops and HL-LHC Upgrade: Strong NSF support of facilities
  - Ops and Upgrade were funded at the full rate expected by the projects.
- For FY25, this program funded a relatively small number of proposals.
  - NSF policy change: No out-year commitments

    Most awards were just for 1 year.
- Status of the FY26 proposals
  - Review is ongoing…
  - Strong direction to support administration's R&D priorities, but these were announced after the proposals were submitted.
  - Expect funding decisions by the end of June.

Questions: Contact Jim Shank, jshank@nsf.gov

Particle Physics, Particle Astrophysics, and Cosmology – Theory: 2025-2026

- 2025: Program paid off all outyear commitments but made extremely few awards. Most proposals were declined.
- 2026: Review is ongoing…
  - Number of proposals is almost twice normal
  - Relatively small overlap with Priority areas makes budgeting difficult, options limited
  - Grants must be fully funded at inception

  → Expecting another extremely challenging year

Questions: Contact Keith Dienes, kdienes@nsf.gov

Nuclear Physics: 2024-2026 (Theory and Experiment)

- 2024: recovered from COVID
  - # of proposals submitted and # from new PIs comparable to pre-COVID
- 2025: complicated
  - NSF policy change: obligate full funding when grant established (not incrementally) → effectively ~ 65% reduction in available funds
  - Far fewer grants made; most 3-yr, some 2-yr, some 1-yr (mainly to support students and postdocs)
- 2026: strong direction to support administration's R&D priorities
  - Reduction in funding for core nuclear physics compared to prior years

Questions: Contact
Experiment: Allena Opper,
aopper@nsf.gov
Theory: Bogdan Mihaila,
bmihaila@nsf.gov

Particle Astrophysics -- Experiment: 2025-2026

- Underground Physics (PA-UG): supports university research that generally locates experiments in low-background environments:
  - Underground experiments, reactor neutrinos, quantum sensing (together with AMO-E)
  - Searches for the direct detection of dark matter (axions/WIMPS)
- IceCube Science Program (PA-IC): supports university research making use of data collected by IceCube for neutrino, cosmic ray, and particle physics
- Cosmic Phenomena (PA-CP): supports university research that uses astrophysical sources and particle-physics techniques to study fundamental physics:
  - Astrophysical sources of cosmic rays, gamma rays, neutrinos

Questions: Contact
Camillo Mariani, cmariani@nsf.gov
Helio Takai, htakai@nsf.gov

Particle Astrophysics -- Experiment: 2025-2026 (continued)

2025: complicated

- NSF policy change: obligate full funding when grant established (not incrementally)
- Far fewer grants made; most 1-yr, some 2-yr (mainly to support students and postdocs)

2026: strong direction to support administration's R&D priorities

- Reduction in funding for core programs compared to prior years

IceCube: Status update

The IceCube collaboration recently completed the IceCube upgrade with the successful deployment of 7 more strings at the South Pole station in January 2026. The IceCube upgrade is now being commissioned and should start normal operations by Fall 2026. The Physics Section in MPS supports several US institutions on the analysis of the data coming out of the IceCube detector and the newly installed IceCube upgrade.

The IceCube project is supported by the GEO and MPS directorates at NSF.
For questions, contact the Experimental Particle Astrophysics Program Directors at NSF.

Come join us!

- NSF is hiring again, not only in Physics, but across the Foundation.
- We anticipate opportunities for Program Directors at all ranks, including early-career scientists and more senior scientists.
- These searches will be for both Perm Feds and IPAs (“rotators”).
- If interested, keep an eye on USAjobs.gov and contact Program Directors in your area of interest for more info.

Thank you!