Physics Instructor Advocacy on Capitol Hill

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Abstract

I recently participated in the Congressional Visits Day (CVD) program co-sponsored by the American Association of Physics Teachers (AAPT) and the American Astronomical Society (AAS), stepping out of the classroom to advocate directly on Capitol Hill. In this presentation, I will share key takeaways regarding the major issues facing physics and astronomy research and education at the federal level—including research funding, critical teacher workforce shortages, and the challenges of navigating shifting executive branch priorities and policy uncertainties. My main goal is to demystify congressional outreach and show just how accessible it is for us educators to schedule meetings and talk with our representatives in Congress. Attendees will leave with an up-to-date overview of federal STEM policy issues, practical strategies for framing classroom realities for representatives, and an actionable roadmap for stepping into their own role in national advocacy.

About me



- First career in financial services
- Physics teaching experience in NYC and Virginia
- Affiliations
  - Member of the AAPT Physics Belonging and Access Council
  - Curriculum Writer and former Regional Lead at STEP UP
  - Editorial Board Member at the URC
  - Board Member and Leader at STEMteachersNYC
  - Co-Founder of STEMteachersDMV
  - Secretary of the Yale Science & Engineering Association
  - Co-Founder of Yale Alumni Educators
  - Editorial Board Member for TPT
  - Fellow Emeritus at Math for America

Turn-and-talk

Why should physics researchers and physics educators talk to lawmakers?



What is Congressional Visits Day?

- Hosted annually by AAS (with grant funding to include AAPT this year!)
- Welcomes researchers and educators from undergrad through professor-level
- Includes support from AIP and people who work on the Hill



September 14 and 15 in Washington, DC:

- **Day 1:** training on current events, legislative priorities, and how to talk to your representatives (or their staffers)
- **Day 2:** a marathon of meetings with representatives' offices

Why I applied

- I worry about declining federal support for science
- I wanted to learn about how I can advocate for science policy
- I want to empower my students to advocate productively for STEM

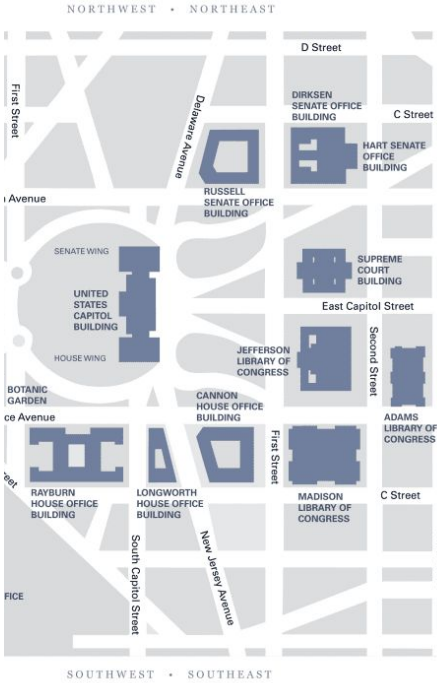


Things I needed to learn

1. Who my senators and representative are, what committees they serve on, what legislation they support
2. The division of responsibilities between Congress and the Executive Branch, specifically agencies (NSF, NIH, NASA, etc.)
3. What's going on with the OMB (Office of Management and Budget)
4. How spending has changed at federal agencies over the past 20 months

Our Hill Day

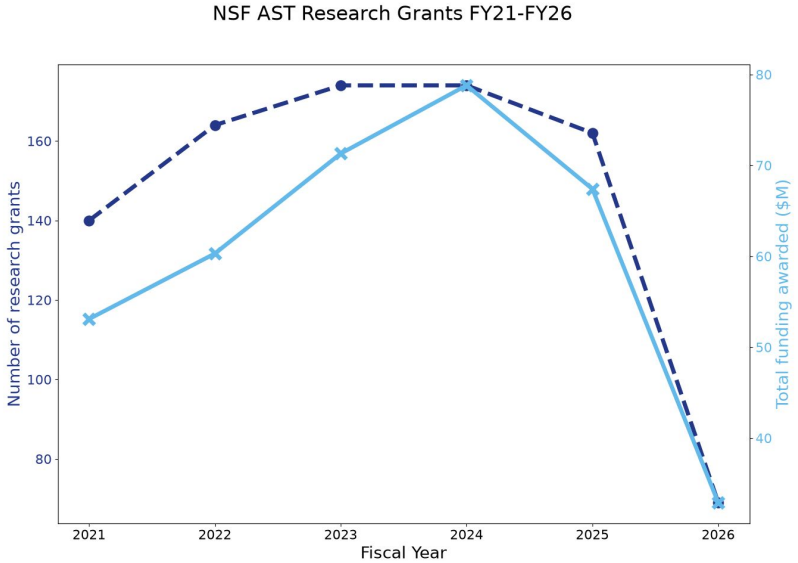
- 9:00am, Virginia Senator Mark Warner’s office
- 10:30am, Maryland Senator Chris Van Hollen’s office
- 11:30am, Virginia Senator Tim Kaine’s office
- 3:00pm, Maryland Representative Jamie Raskin’s office
- 3:30pm, Virginia Representative James Walkinshaw’s office
- 4:00pm, Virginia Representative Morgan Griffith’s office
- 4:30pm, Virginia Representative Don Beyer’s office



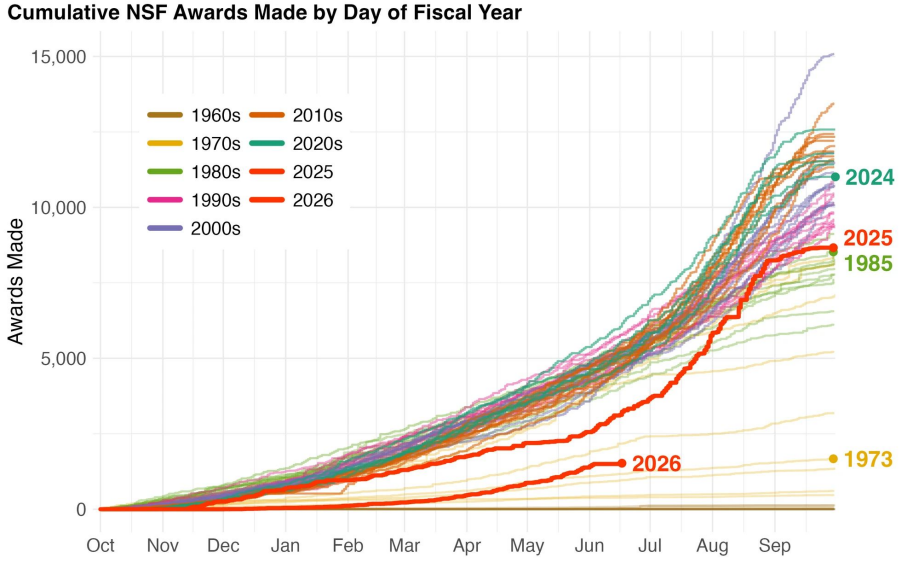
Team DMV with Senator Van Hollen



Priority #1: research funding



https://aas.org/posts/news/2026/08/nsf-astronomical-sciences-grants-reduced-over-50-fiscal-year-2026



https://grantwitness.org/nsf/updates/2026-06-19-nsf-worst-year-in-generations

Priority #2: physics education

Effective programs at risk

K-12 Education

Programs that:

- train and place qualified STEM teachers in high-needs districts
- expose K-12 students to STEM

Undergraduate Education

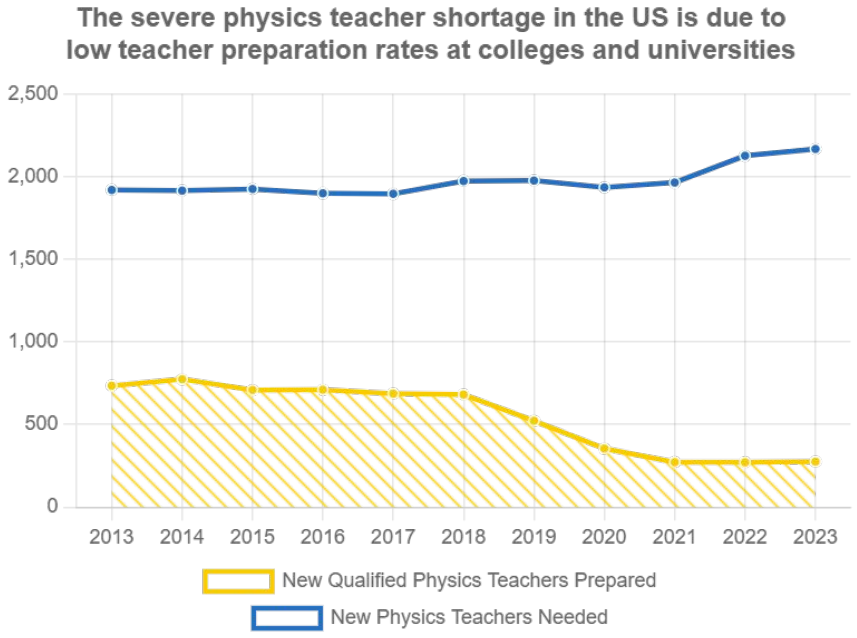
Programs that:

- provide financial support, research, and internship opportunities
- improve support structures for underrepresented students

Graduate Education

Programs that:

- provide "bridge" support to enter STEM Ph.D. programs
- provide mentorship
- provide financial support



https://phystec.org/report-card/

Priority #3: dark and quiet skies

THREATS TO DARK & QUIET SKIES BY
SATELLITE CONSTELLATIONS

AMERICAN ASTRONOMICAL SOCIETY



A screenshot of LeoLabs Low Earth Orbit Visualization tracking thousands of operational satellites, defunct satellites, spent rocket bodies, and pieces of debris in orbit around the Earth.



Optical interference of NGC 5353/4 galaxy group from satellite constellation trails.



All ground-based optical, infrared, and radio observatories are affected. Simulations that assume some 60,000 LEO satellites in realistic orbital configurations predict that Vera C. Rubin Observatory, hosting a large optical telescope with a wide field of view that commenced operations in 2025, may be **impacted by at least one satellite streak on up to 30% of observations at the beginning and end of each night**.

Thank you!

Remember, your voice matters - and it's easier than you think to speak up.

