

US Physics Departments Expect to Shrink Graduate Programs

Student enrollment and guaranteed financial support are expected to fall amid anticipation of federal budget cuts, a new report finds.

By **Clare Zhang**

Many US graduate programs in physics and astronomy are expecting lower enrollment in the next two classes of first-year students, according to a [report](#) published last week by the American Institute of Physics that assesses the impacts of uncertainty about the future of federal science funding and policy under the Trump administration.

The American Institute of Physics (AIP) contacted all 292 department chairs at schools offering graduate degrees in physics and astronomy in the US and received 115 replies during the response window between April 3 and 16.

The report anticipates that first-year enrollment in physics and astronomy graduate programs could decline by about 13% this fall. This includes a 25% decline at private institutions and a 7% decline at public institutions. Those values are derived from

respondents' estimates of how many more or fewer first-year students they expect at their own institutions in 2025 compared to 2024. Many department chairs said they believe the decline in first-year students will be even larger in the fall of 2026.

“It is almost certain we will have to shrink the size of our graduate program in future years due to the anticipated reduction in federal funding,” one respondent wrote. “Faculty will have to get more adept at pursuing nonfederal sources, but that is unlikely to cover the gap. Faculty and students alike are all very concerned, and I suspect some students will start to leave the program prematurely if they perceive academia [and] national labs as an increasingly nonviable path for the future.”

Although only three respondents said they have rescinded at least one offer of enrollment, several said their university administration did not allow them to make follow-up offers when an offer was declined. Others reported that their departments have limited their funding offers to only cover the first year of study or have removed language that commits to providing funding.

In addition, 18% of departments reported that at least one of their faculty members had federal funding terminated or reduced, and another 28% expected such news in the next six months.

Emotional Toll

Several department chairs described a climate of intense stress and decreased morale among faculty and students. One respondent characterized the effects so far as “mostly psychological,” as researchers anticipate cuts to grants and [indirect cost rates](#) that they believe will eliminate staff, leave



Credit: Changbok Ko/Unsplash

scientific infrastructure to deteriorate, and set back young scientists' careers.

“One cannot work like this—all energy goes in thinking how to survive and not in physics — it is like being in the war,” another department chair wrote. “No one can be productive in a climate like this—it is the end of the US scientific and technical dominance in the world—we will not recover from this in a decade,” they added.

The funding uncertainty has also led to faculty and staff hiring freezes. One respondent expressed concern that their institution would be unable to replace retiring faculty in the long term.

Many department chairs also expressed concern regarding the Trump administration's border policies and their impacts on foreign researchers and international travel. One respondent said undergraduate students at their university have had their visas **revoked**, and another said they have witnessed a “chilling effect” on foreign postdocs and students. News outlets have reported cases of student arrests or **deportations** following revoked visas.

One respondent wrote that graduate students are now more interested in searching for positions abroad, while another said some scientists are leaving the country because of the unpredictable and hostile environment.

Traveling researchers often discuss what to delete from their phones and consider using burners, another respondent said, adding that British and Canadian researchers avoided their most recent meetings. A French scientist garnered attention in March **after being denied** US entry on his way to a conference, and last week the Canadian Association of University Teachers **issued** travel guidance warning its members against nonessential travel to the US.

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