

APS International Applicants Survey Results Summary

**Prepared by the APS Office of Government Affairs
July 2018**

At the 2018 APS March Meeting, a small number of APS members from U.S. universities informed the APS Office of Government Affairs (OGA) that they had experienced a substantial decrease in the number of applications from non-U.S. based students to their respective physics PhD programs between 2017 and 2018. To help inform a potential response from APS, OGA worked with department chairs of U.S. physics PhD programs that reported graduating 10 or more students per year to gather data concerning the number of international applications. A total of 74 department chairs were contacted, and 49 responded to the inquiry. The 49 responding departments represent 41 percent of all physics graduate students enrolled in the U.S. and 40 percent of all international physics graduate students enrolled in the U.S.

The following report is a summary of the data collected from the 49 department chairs that responded. In addition to requesting data on the number of applicants, OGA asked participating department chairs to answer any/all of a set of questions aimed at providing a more complete picture of the situation. Summaries of their responses are also provided.

Questions and Responses

Physics department chairs were initially asked about the number of applications the department received from international students:

Has your institution's physics PhD program experienced a drop in international applications? It would be extremely helpful if you could provide the absolute number of international applicants to the PhD program in 2017 and 2018.

The data acquired from the answers to this question was used to fill in the Table 1 (see below). There was an overall decrease in the number of international applicants to the physics PhD programs that responded to the survey, with an average change of -11.9%. While some institutions did not see a decline in their applicant classes, there were a handful of programs that experienced declines of more than 40%.

Of the 49 institutions that provided data on international applications, 34 provided some response to the following series of follow up questions.

1) How has the general decline in applications impacted your 2018 cohort? Has the overall class size changed? Did you accept more domestic students? Etc.

Of these 34 respondents, few reported an impact on the 2018 cohorts. However, a few (<5) schools did suggest that they took more domestic students this year percentage-wise than in previous years. Some selected comments include:

“We've admitted more domestic students, so as to fill our program. On the other hand, many of the better applicants in the past were international students, so our sense is that the overall quality of the applicants we admitted this year was somewhat lower than in the past.”

“The overall class size is smaller. Approximately same number of offers were made but fewer were accepted. From an economics point of view, one conclusion is that the competition is tougher given fewer applicants, hence the yield on offers is reduced.”

2) Could you comment on what countries had the largest declines in terms of applicants from 2017 to 2018?

From schools that provided their Chinese applicant numbers, there was an average change of -16.4%.

A few department chairs provided some speculation about the possible reasons for the decrease:

“There is speculation among the faculty, but it is not necessarily evidence based: That Chinese institutions have ‘arrived’ in terms of quality, meaning many Chinese students prefer to stay home rather than go to the US for graduate study.”

“Anecdotal evidence and rumors suggest that China has been investing heavily in training young scientists, particularly in the area of condensed matter physics, and so many talented students may be choosing to stay in China for their postgraduate studies rather than go abroad. But Chinese policy cannot explain the drop in applicants from other countries that we have seen. There is a sense among my colleagues that the current administration's hostile posture toward immigrants may be behind the drop in international applicants, at least in part.”

“One theory is that there is now more information flow between US schools and Chinese students allowing them to be more selective in which schools they apply to, instead of sending out a large number of applications blindly.”

3) Has there been any discussion on where international students might be applying instead of the U.S.? Any insight you could provide here would be very helpful.

There were very few responses to this question. However, some department chairs offered the following comments:

“I think I heard that one or two Iranian students were applying to programs in the UK rather than the U.S., presumably because of the unfriendly visa situation. I know our currently-enrolled Iranian students are also nervous about their status.”

“We have noted large increases in the number of applicants to Canadian universities with which we have contacts, but we have not done a systematic analysis.”

Table 1: International Applications from U.S. Physics PhD Programs

University	2017 International Applicants	2018 International Applicants	% Change
University 1	72	25	-65.3%
University 2	79	38	-51.9%
University 3	-	-	-46.0%
University 4	79	43	-45.6%
University 5	61	35	-42.6%
University 6	191	124	-35.1%
University 7	83	55	-33.7%
University 8	64	43	-32.8%
University 9	-	-	-28.0%
University 10	102	78	-23.5%
University 11	428	329	-23.1%
University 12	241	188	-22.0%
University 13	240	188	-21.7%
University 14	102	84	-17.6%
University 15	85	70	-17.6%
University 16	206	174	-15.5%
University 17	197	168	-14.7%
University 18	149	130	-12.8%
University 19	322	284	-11.8%
University 20	95	85	-10.5%
University 21	71	64	-9.9%
University 22	68	62	-8.8%
University 23	59	55	-6.8%
University 24	187	175	-6.4%
University 25	50	47	-6.0%
University 26	414	390	-5.8%
University 27	146	138	-5.5%
University 28	149	142	-4.7%
University 29	343	327	-4.7%
University 30	97	93	-4.1%
University 31	140	135	-3.6%
University 32	321	314	-2.2%
University 33	169	167	-1.2%
University 34	170	168	-1.2%
University 35	268	267	-0.4%
University 36	-	-	0.0%
University 37	-	-	0.0%
University 38	-	-	0.0%
University 39	-	-	0.0%
University 40	220	220	0.0%
University 41	-	-	0.0%
University 42	350	350	0.0%
University 43	254	264	3.9%
University 44	254	264	3.9%
University 45	249	260	4.4%
University 46	365	385	5.5%
University 47	125	137	9.6%
University 48	82	95	15.9%
University 49	53	63	18.9%

A dashed line indicates that the university provided the overall percentage change, rather than the raw applicant numbers