

**2009 APS Student Membership Survey
Final Report
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Highlights

- Professor and advisor recommendations continue to be the most common way that graduate student members first learn about APS. Attending APS meetings and contributing papers at the meetings are also common ways members first learn about the society.
- The two reasons most often cited by graduate students in the U.S. and abroad for joining APS were to attend an APS meeting or present a paper at an APS meeting. Also, the number of graduate students who reported attending APS meetings within the last two years was virtually identical to the number who reported presenting a paper at an APS meeting.
- One out of three graduate student members residing in the U.S. and abroad reported that they attended the 2009 March Meeting in Pittsburgh. One out of three did not attend any APS meetings in the last two years. The last third attended at least one APS meeting but not the Pittsburgh meeting.
- Over half of the graduate student members who attended an APS meeting within the past two years did not attend any special programs for students at those meetings. However, more than 60% of recent degree recipients residing in the US had attended at least one special program for students.
- Nearly 70% of graduate student members who were in their first year or have completed one year of graduate study did not attend any APS meetings within the past two years. The converse is true among those who have completed at least three years of graduate study, where nearly three quarters had attended one or more APS meetings within the past two years.
- Graduate students residing in the U.S. during 2009 were more likely than graduate students four years ago to report that attending APS meetings at reduced rates was an important or essential member benefit. About 85% of US-resident graduate students or recent degree recipients reported that attending APS meetings at reduced rates was an important or essential member benefit.
- We checked the write-ins from those student members who resided abroad and indicated that they had attended an APS division meeting. The verbatim comments indicated that these students had in fact attended a divisional meeting. The vast majority of those were DFP, DPP, DAMOP, and DNP.
- Nearly three-quarters of the respondents cited Physics Today as an important or essential benefit to them. The majority of graduate students in the U.S. and abroad found the free online journal benefit to be important or essential. However, 2009 respondents were less likely to than 2005 respondents to cite these publication benefits as important or essential.
- Around two out of three respondents indicated the online career center and the career webpage to be important or essential to them. U.S.-resident respondents were more likely than those residing abroad to highly value these career service benefits. Both the importance of employment-related benefits (online career center and career webpage) and the awareness of these activities increased with each year of graduate study. However, the awareness of APS

career guidance was higher among entering students and those who had completed 5 years of study.

- While the majority of graduate student members feel some connection with an APS unit (divisions, topical groups, forums or geographic sections), only one out of six respondents feel fairly well or very closely connected to an APS unit. Among U.S.-resident students, the likelihood of belonging to an APS unit is higher for those who have completed at least 4 years of study than for those who completed 3 or fewer years. However, there appears to be very little change in connectedness as a function of years of graduate study completed.
- Graduate students abroad are less likely than their U.S. counterparts to belong to an APS unit. However, recent degree recipients residing abroad are as likely as US-residents to belong to an APS unit.
- Email is by far the preferred means of communication with the APS among survey respondents. It seems clear at this time that social networks like facebook, LinkedIn, and Twitter are not how respondents want to communicate with APS.
- About three quarters of U.S. graduate students and recent graduates reported that they were probably or definitely renew their APS memberships. About two-thirds of their counterparts abroad were as highly likely to renew membership with APS.
- Respondents residing in the U.S. were evenly split between U.S. citizens and those on temporary visas. Non-US citizens who have completed 2 or 3 years of study appear to be over-represented among APS student members compared to the graduate student population as surveyed by AIP.
- The majority of respondents in the U.S. planned to take a postdoctoral appointment after receiving their PhDs. About one in ten respondents were unsure what their post-degree plans were.

Table 1. Response rates for APS Student Membership Survey, 2009.

Residence of Student Members	Student member Population N	Undeliverable Email addresses N	Respondents N	Response rate %
United States	7257	379	3044	44
Abroad	1337	66	685	54
Totals	8594	445	3729	46

Footnotes:

a) The first mailing yielded an 18% response rate.

- The data in this report are based upon the respondents to three mailings of the 2009 APS Student Membership Survey. Invitations to participate in the survey were sent via email to 8594 APS graduate student members in the U.S. and abroad as of August 29. The first e-mail was sent on September 29. Subsequent e-mails to those who had not responded were sent on October 2 and 14. 445 email addresses were undeliverable. Of the remaining 8149 possible contacts, 46% responded.
- In 2005, all student members residing in the U.S. were invited to participate in the survey, whereas in 2009, only those with graduate student memberships (U.S. and abroad) were invited. The first mailing in 2005 yielded a higher response rate than in 2009 (29% in 2005 vs. 18% in 2009) and the final response rate after three email contacts in 2005 was 53% compared to 46% in 2009.

Table 2. Current status of graduate student members residing in US and abroad, 2009.

	US N	Abroad N
Undergraduate	17	15
Graduate student	2453	487
Recent graduate and not currently a student	489	142
Neither a student nor a recent graduate	39	34
Other	5	-
Skipped this question	-	1
Left questionnaire	41	6
Number of respondents	3044	685

Footnotes:

a) "Skipped this question" refers to respondents who skipped this question, but continued with the questionnaire.

b) "Left questionnaire" refers to respondents who stopped completing the questionnaire before reaching this question.

- For some members, the student or employment status when they last renewed their APS membership may have changed by the time of the survey. This table shows that many graduate student members have recently earned their graduate degrees and a few others are no longer graduate students. Those who are currently graduate students and those who are recent graduates are included in the following tables.

Table 3. Years of graduate school completed, current graduate students only, 2009.

	US %	Abroad %
In first year	3	3
Completed one year	11	8
Completed two years	19	19
Three years	19	24
Four years	20	18
Five years	15	14
Six years	8	7
Seven years or more	5	5
Number of respondents	2450	483

Footnotes:

a) In Question 3.1 respondents could only check one item.

b) 7 respondents were not included in this table because 1 left the question blank and 6 dropped out of the survey.

- Nearly three-fourths of current graduate student members in the U.S. and abroad have completed 2 to 5 years of graduate study.

Table 4. How respondents first learned about APS by current status, 2009.

	Graduate Students		Recent Degree Recipients	
	US %	Abroad %	US %	Abroad %
Professor or advisor recommendation	42	42	44	42
Friend or peer	17	14	17	14
Attendance at an APS meeting/conference	16	19	20	22
APS website	10	18	6	16
SPS membership offer	6	1	4	1
APS student poster	3	1	2	1
APS brochure	2	1	1	-
APS local section	1	-	1	-
Promotional email	1	-	1	1
Forum on Graduate Student Affairs	-	-	1	-
Other	2	4	3	3
Number of respondents	2451	486	489	142

Footnotes:

a) In Question 1, respondents could only check one item.

b) 47 respondents wrote in that they had first learned about APS from an APS publication or citation.

c) 3 respondents were not included in this table because they left the question blank.

- Professor and advisor recommendations continue to be the top way graduate student members first learn about APS.
- Attending APS meetings and contributing papers at the meetings are common ways members first learn about APS.
- Somewhat more members abroad than in the U.S. first learned about APS through the APS website.

Table 5. Why respondents joined APS by current status, 2009.

	Graduate Students		Recent Degree Recipients	
	US %	Abroad %	US %	Abroad %
To attend an APS meeting	48	46	43	42
To present a paper at APS meeting	45	45	45	40
Professor recommended they join	39	30	39	28
View APS as professional organization	33	21	39	28
Physics Today	23	24	25	24
Lower meeting registration fee	16	17	16	14
Friend or peer recommended they join	13	10	12	9
Forum on Graduate Student Affairs	2	1	1	1
Discounted car insurance	2	-	-	1
Other	2	3	2	1
Number of respondents	2443	487	488	141

Footnotes:

a) In Question 2, respondents were allowed to check up to 4 items.

b) 23 respondents wrote in that the reason they joined APS was because it was free to do so at the time.

c) 12 respondents were not included in this table because they left the question blank.

- Respondents were given a list of reasons why they joined APS. The two most often cited reasons by respondents in the U.S. and abroad were to attend an APS meeting or present a paper at an APS meeting. It should be noted that one does not need to be an APS member to attend an APS meeting. Also, virtually the same number of graduate student members report attending APS meetings to present a paper at an APS meeting.
- A significant percentage of respondents reported that their professors recommended that they join. Respondents abroad were less likely to cite this reason for joining.
- About a third of the respondents viewed APS as their professional organization and joined for that reason. Respondents abroad were less likely to cite this reason for joining.
- One out of four respondents in the U.S. and abroad cited Physics Today as a reason for joining APS.

Table 6. APS meetings attended in the last two years by current status, 2009.

	Graduate Students		Recent Degree Recipients	
	US %	Abroad %	US %	Abroad %
April 2009 in Denver	6	2	8	3
March 2009 in Pittsburgh	34	31	31	19
April 2008 in St. Louis	3	1	6	2
March 2008 in New Orleans	15	10	26	19
Division Meetings	20	19	23	16
Section Meetings	4	1	3	2
None	35	44	31	50
Number of respondents	2425	479	481	139

Footnotes:

a) In Question 4 respondents could check all that applied.

b) The division meetings that non-US residents tended to go to were the division of fluid dynamics, the division of plasma physics, the division of atomic, molecular, and optical physics, and the division of nuclear physics meeting.

c) 47 respondents were not included in this table because 26 left the question blank and 21 dropped out of the survey.

- One out of three graduate student members U.S. and abroad attended the 2009 March Meeting in Pittsburgh. One of out of three did not attend any APS meetings in the last two years. The last third attended at least one APS meeting but not the Pittsburgh meeting.
- We checked the write-ins from those student members who reside abroad and indicated that they had attended an APS division meeting. The verbatim comments indicated that these students had in fact attended a divisional meeting. The vast majority of those were DFP, DPP, DAMOP, and DNP.
- Comparatively few graduate students attend April meetings and section meetings.

Table 7. Special programs for students attended in the last two years by current status, 2009.

	Graduate Students		Recent Degree Recipients	
	US %	Abroad %	US %	Abroad %
Student receptions	20	9	23	12
Student paper sessions	16	6	15	9
Workshops on current research topics	15	15	20	9
Career panel discussion & workshops	11	3	15	7
Lunch with the experts	11	8	15	6
Job fair	9	5	23	10
Other	1	-	1	2
None of the above	53	70	39	71
Number of respondents	1561	262	323	68

Footnotes:

a) In Question 4.1 respondents could check all that applied.

b) Based only on respondents who said that they had attended one or more APS meetings in the last two years.

c) 91 respondents were not included in this table because 67 left the question blank and 24 dropped out of the survey.

- The data in this table only include respondents who noted in the previous question that they had attended an APS meeting within the past two years.
- Over half of the graduate student members who attended an APS meeting within the past two years did not attend any special programs for students at those meetings. However, more than 60% of recent degree recipients residing in the US had attended at least one special program for students.
- Graduate students residing abroad were less likely than their U.S. counterparts to attend special programs for students at APS meetings.

Table 8. Respondents who rated each publication as an important or essential benefit by current status, 2009.

	Graduate Students		Recent Degree Recipients	
	US %	Abroad %	US %	Abroad %
Physics Today	69	74	78	69
Free online journal for student members	50	53	47	42
APS News	33	35	40	30
Online member directory	24	27	26	21
APS Weekly Newsbrief	21	22	21	19
Number of respondents	2428	476	480	140

Footnotes:

a) In Question 5 respondents were asked to rate how important the publications were on a scale from 1 to 5, where 1 was “Not at all important”, 2 was “Somewhat important,” 3 was “Important,” 4 was “Essential,” and 5 was “Don’t know.”

The percentages in this table represent those who chose 3 or 4.

b) Respondents who skipped a statement were counted as 5 “Don’t know.”

c) 47 respondents were not included in this table because 11 left the entire question blank and 36 dropped out of the survey.

- Nearly three-quarters of the respondents cited Physics Today as an important or essential benefit to them.
- The majority of graduate students in the U.S. and abroad found the free online journal benefit to be important or essential. This is somewhat lower among recent degree recipients.
- About one out of three respondents reported that APS News is an important or essential student benefit. One out of four reported that the online member directory is important or essential. And one out of five reported that APS Weekly Newsbrief is important or essential.

Table 9. Respondents who rated each member service as important or essential by current status, 2009.

	Graduate Students		Recent Degree Recipients	
	US %	Abroad %	US %	Abroad %
Attend APS meetings at reduced rates	86	81	85	71
Online Career Center	65	57	70	47
Career Webpage	62	56	65	48
Assistance with international travel issues	36	41	35	35
Tools for grassroots lobbying efforts	25	21	27	15
Auto insurance (GEICO)	22	17	20	15
Participate in FGSA activities	21	21	21	12
Email alias	20	26	22	20
Group life insurance	16	20	18	15
Number of respondents	2393	460	472	136

Footnotes:

- a) In Question 6 respondents were asked to rate how important the member services were on a scale from 1 to 5, where 1 was “Not at all important”, 2 was “Somewhat important,” 3 was “Important,” 4 was “Essential,” and 5 was “Don’t know.” The percentages in this table represent those who chose 3 or 4.
- b) Respondents that skipped a statement were counted as 5 “Don’t know.”
- c) 110 respondents were not included in this table because 39 left the question blank and 71 dropped out of the survey.

- About 85% of US-resident graduate students or recent degree recipients reported that attending APS meetings at reduced rates was an important or essential member benefit.
- Around two out of three respondents indicated the online career center and the career webpage to be important or essential to them. U.S. respondents were more likely than those abroad to highly value these career service benefits.
- More than a third of the respondents, regardless of their country of residence, cited the assistance with international travel issues to be an important or essential member service.

Table 10. Extent to which students feel a close connection with APS units by current status, 2009.

	Graduate Students		Recent Degree Recipients	
	US %	Abroad %	US %	Abroad %
Do not belong to any APS units	18	34	16	21
Not at all connected	27	22	17	21
Somewhat connected	41	36	46	41
Connected fairly well	10	6	14	13
Very closely connected	4	2	7	4
Number of respondents	2393	468	470	135

Footnotes:

a) In Question 8 respondents could only check one item.

b) 105 respondents were not included in this table because 20 left the question blank and 85 dropped out of the survey.

- While the majority of graduate student members feel some connection with an APS unit (divisions, topical groups, forums or geographic sections), only one out of six respondents feel a close connection.
- Graduate students abroad are less likely than their U.S. counterparts to belong to an APS unit. Recent degree recipients residing in the U.S. and abroad are equally likely to belong to at least one APS unit.

Table 11. Benefitted from connection to an APS unit by current status, 2009.

	Graduate Students		Recent Degree Recipients	
	US %	Abroad %	US %	Abroad %
Did benefit from the connection	42	33	48	39
Did not benefit from the connection	58	67	52	61
Number of respondents	1954	308	395	104

Footnotes:

a) In Question 8.1 respondents could only check one item.

b) Based only on respondents who said that they belonged to an APS unit.

c) 119 respondents were not included in this table because 34 left the question blank and 85 dropped out of the survey.

- A significant number, but less than half of the respondents who belonged to at least one APS unit, benefitted from their connections with APS units. Members in the U.S. were more likely than those abroad to have benefitted from APS units.

Table 12. Awareness of the following student resources on the APS website by current status, 2009.

	Graduate Students		Recent Degree Recipients	
	US %	Abroad %	US %	Abroad %
Online career center	40	42	59	46
APS meetings advice & tips	35	44	35	40
Career guidance for students	26	27	35	32
Scholarship and fellowship information	24	31	28	31
Dedicated page for students	19	26	16	21
Info on female-friendly graduate programs	14	15	16	17
Number of respondents	2344	454	461	131

Footnotes:

- a) In Question 9 respondents were asked to rate how aware they were about the member services on a scale from 1 to 5, where 1 was “Very aware”, 2 was “Aware,” 3 was “Somewhat aware,” 4 was “Not aware.” The percentages in this table represent those who chose 1 or 2.
- b) Respondents that skipped an item were counted as 4 “Not aware.”
- c) 181 respondents were not included in this table because 55 left the question blank and 126 dropped out of the survey.

- Two out of five graduate student members were aware or very aware of the APS online career center resource for students. Nearly three out of five members who recently earned their graduate degrees in the US were aware or very aware of the APS online career center resource. This suggests that more student members become aware of the online career center as they progress through graduate school. However, awareness levels for the other APS student resources were the same for graduate students and recent degree recipients.

Table 13. Technologies that respondents would utilize for information exchange with APS by current status, 2009.

	Graduate Students		Recent Degree Recipients	
	US %	Abroad %	US %	Abroad %
APS blog	32	33	34	35
facebook	29	21	25	24
Bulletin board	23	18	22	22
Student Listserv	15	6	9	6
LinkedIn	12	9	18	13
Podcasts	10	13	9	9
Mobile device viewing options	7	6	5	9
Twitter	5	6	5	4
Other	2	4	3	1
Number of respondents	1762	323	342	92

Footnotes:

a) In Question 10 respondents could check all that applied.

b) 1052 respondents were not included in this table because 904 left the question blank and 148 dropped out of the survey.

- In addition to the APS website, a third of the respondents to this question would likely use an APS blog to exchange information with APS. Facebook and a bulletin board were the next most likely alternatives.
- Some of the write-in responses suggest that those who did not answer this question might have chosen “none of the above” or “just continue using the website” if those choices were given. Another common write-in was “e-mail”.

Table 14. Respondents' preferred means of communication with APS by current status, 2009.

	Graduate Students		Recent Degree Recipients	
	US %	Abroad %	US %	Abroad %
Email	75	68	74	65
APS Website	15	22	16	23
Postal mail	6	6	7	9
facebook	2	2	2	1
LinkedIn	1	1	1	-
Twitter	-	-	-	1
Other	1	1	-	1
Number of respondents	2301	448	455	128

Footnotes:

a) In Question 13 respondents could only check one item.

a) 239 respondents were not included in this table because 69 left the question blank and 170 dropped out of the survey.

- Email is by far the preferred means of communication with the APS among survey respondents.
- It seems clear at this time that social networks like facebook, LinkedIn, and Twitter are not how respondents want to communicate with APS.

Table 15. Likelihood that respondents will renew APS membership by current status, 2009.

	Graduate Students		Recent Degree Recipients	
	US %	Abroad %	US %	Abroad %
Definitely	32	26	48	38
Probably	41	37	31	36
Possibly	24	32	18	23
No	3	5	3	3
Number of respondents	2336	456	460	128

Footnotes:

a) In Question 14 respondents could only check one item.

b) 191 respondents were not included in this table because 19 left the question blank and 172 dropped out of the survey.

- About three quarters of U.S. graduate students and recent graduates reported that they were probably or definitely renew their APS memberships. About two-thirds of their counterparts abroad were as highly likely to renew membership with APS.

Table 16. Citizenship status, 2009.

	Graduate Students US %	Recent Degree Recipient US %
US citizen	48	44
Permanent US visa	4	8
Temporary US visa	48	48
Number of respondents	2346	457

Footnotes:

a) In Question 15 respondents could only check one item.

b) 139 respondents were not included in this table because 2 left the question blank and 137 dropped out of the survey.

- Respondents residing in the U.S. were evenly split between U.S. citizens and those on temporary visas.

Table 17. Post-degree plans of current graduate students, 2009.

	Graduate Students US %	Graduate Students Abroad %
Take a postdoctoral appointment	50	59
Seek employment in industry	18	14
Seek employment in academia	10	11
Seek employment in Government lab	7	4
Don't know	13	10
Other	2	2
Number of respondents	2446	479

Footnotes:

a) In Question 3.3 respondents could only check one item.

b) 15 respondents were not included in this table because 2 left the question blank and 13 dropped out of the survey.

- Graduate student and recent graduate degree recipients were asked to describe their plans immediately after earning their degrees. Since there were no distinctions between graduate degree levels, some of the respondents would have been referring to their plans after receiving their masters, while the vast majority would have been referring to their plans after their PhDs.
- The majority of respondents in the U.S. planned to take a postdoctoral appointment after receiving their PhDs.
- About one in ten respondents were unsure what their post-degree plans were.

Table 18. Areas that graduate student members of APS are studying by current status, 2009.

	Graduate Students	
	US %	Abroad %
Condensed matter physics	30	39
Plasma or fluids physics	13	16
Atomic, molecular or optical physics	11	10
Materials physics	10	7
Particle physics	7	5
Biological physics	6	6
Nuclear physics	6	2
Astrophysics	5	3
Chemical physics	4	3
Other	8	9
Number of respondents	2419	477

Footnotes:

a) In Question 3.2 respondents could only check one item.

b) 44 respondents were not included in this table because 33 left the question blank and 11 dropped out of the survey.

- About a third of the graduate student respondents reported to be studying condensed matter physics. The top three areas in which over half of the graduate students reported to be studying are condensed matter physics, plasma and fluid physics, and atomic, molecular, optical physics.

- Among the write-ins for “other”, the majority involved fine physics fields and a few were engineering. Here are the groups that predominated among the write-ins:

45 wrote fluid mechanics, non-linear dynamics, or fluid dynamics

35 wrote engineering

27 wrote gravitational physics, relativity, or cosmology

22 wrote computational or mathematical physics

2005 versus 2009 Analysis

Table 19. How US resident graduate students first learned about APS, 2005 and 2009.

	2009 %	2005 %
Professor or advisor recommendation	42	41
Friend or peer	17	18
Attendance at an APS meeting or conference	16	16
APS website	10	7
SPS membership offer	6	7
APS student poster	3	4
APS brochure	2	2
APS local section	1	1
Promotional email	1	-
Forum on Graduate Student Affairs	-	-
Other	2	5
Number of respondents	2443	2814

- Professor and advisor recommendations to join APS continue to be the primary way U.S. graduate students first learn about the APS.

Table 20. Why US resident graduate students joined APS, 2005 and 2009.

	2009 %	2005 %
To present a paper at an APS meeting	45	48
Professor recommended they join	39	36
View APS as professional organization	33	40
Physics Today	23	31
Lower meeting registration fee	16	23
Friend / peer recommended they join	13	14
Forum on Graduate Student Affairs	2	3
Discounted car insurance	2	3
Other	2	3
Number of respondents	2443	2731

Footnotes:

a) Respondents were asked to choose up to 4 reasons why they joined APS.

- U.S. resident graduate students in 2009 were less likely than their peers in 2005 to cite Physics Today, lower meeting registration fees, and viewing APS as their professional organization as reasons for joining APS.

Table 21. US resident graduate students who rated the following services and benefits of APS as essential or important, 2005 and 2009.

	2009 %	2005 %
Attend APS meetings at reduced rates	86	77
Physics Today	69	77
Career webpage	62	62
Free online journal for student members	50	56
APS News	33	39
Grassroots lobbying efforts *	25	72
Online member directory	24	27
GEICO auto insurance	22	20
Participate in FGSA activities & governance	21	17
Email alias	20	19
Group life insurance	16	15
Number of respondents	2393	2711

Footnotes:

* There was a wording change. In 2005 the option read “Grassroots lobbying efforts for physics funding,” and in 2009 it said “Tools for grassroots lobbying efforts.”

a) In Question 6 respondents were asked to rate how important the member services were on a scale from 1 to 5, where 1 was “Not at all important”, 2 was “Somewhat important,” 3 was “Important,” 4 was “Essential,” and 5 was “Don’t know.” The percentages in this table represent those who chose 3 or 4.

- Graduate students in the U.S. during 2009 were more likely than graduate students four years ago to report that attending APS meetings at reduced rates was an important or essential member benefit.
- Among benefits that 2009 respondents were less likely than 2005 respondents to cite as important or essential were publication benefits: Physics Today, free online journal for student members and APS News.

Table 22. Special programs for students at APS meetings attended by US resident graduate students in the last two years, 2005 and 2009.

	2009	2005
	%	%
Student receptions	20	22
Student paper sessions	16	12
Lunch with the experts	11	11
Career workshops	11	6
Job fair	9	9
Other	1	4
Number of respondents	1561	1758

Footnotes:

a) Based only on respondents who said that they had attended one or more APS meetings in the last two years.

- Among U.S. graduate students who attended an APS meeting within two years prior to taking their respective surveys, their level of participation of APS special programs for students at the meetings were relatively similar. There were slight increases in proportion of US resident graduate students who reported that they attended career workshops.

Table 23. Number of years of graduate school US resident students have completed, 2005 and 2009.

	2009 %	2005 %
1 year or less of graduate school	14	12
2 years of graduate school	19	15
3 years of graduate school	19	21
4 or more years of graduate school	48	52
Number of respondents	2453	2740

- Respondents in 2009 compared to those in 2005 included somewhat more students in their early years of graduate study.

Table 24. Post-degree plans of current US resident graduate students, 2005 and 2009.

	2009 %	2005 %
Take a postdoctoral appointment	50	46
Seek employment in industry	18	20
Seek employment in academia	10	11
Seek employment in Government lab	7	7
Don't know	13	13
Other	2	3
Number of respondents	2446	2731

- The distributions of post-degree plans among U.S. resident graduate students in 2009 and 2005 are virtually the same.

Table 25. Areas that graduate student members of APS are studying by current status, 2005 and 2009.

	2009 %	2005 %
Condensed matter physics	30	29
Plasma or fluids physics	13	13
Atomic, molecular or optical physics	11	10
Materials physics	10	9
Particle physics	7	7
Biological physics	6	6
Nuclear physics	6	5
Astrophysics	5	5
Chemical physics	4	4
Other	8	11
Number of respondents	2419	2714

Footnote:

a) In 2005, “undecided” was included as a choice. 1% of the respondents reported to be “undecided” and they are included in “other”. “Undecided” was not listed as a choice in 2009.

- The distribution of specialization among graduate student members is very similar to that found in AIP surveys of all physics graduate students. The sole exception is that graduate students who are APS members are more likely to choose plasma or fluids physics than are physics graduate students in general.

Analyses for selected questions by Years of graduate study completed

The following tables analyze several questions by the respondents' years of graduate study completed. Questions 1, 2, 3.2, 3.2, 10, 13, and 14 by years of graduate study are not in this section because they showed no noteworthy differences. However, these and other additional analyses are available upon request.

Table 26. APS meetings attended in the last two years by years of graduate study, only current U.S. graduate students, 2009.

	Years of graduate study completed					
	One or less	Two	Three	Four	Five	Six or more
	%	%	%	%	%	%
Attended one or more APS meetings within the last two years	31	60	71	74	75	74
Did not attend any APS meetings within the last two years	69	40	29	26	25	26
Number of respondents	312	452	476	495	373	316

Footnotes:

a) 26 respondents were not included in this table because 19 left the question blank and 7 dropped out of the survey.

Table 27. Participated in student-oriented programs by years of graduate study, 2009. Only current U.S. graduate students who attended an APS meeting within last 2 years.

	Years of graduate study completed					
	One or less	Two	Three	Four	Five	Six or more
	%	%	%	%	%	%
Attended one or more student programs at APS meetings within the past two years	44	46	42	45	53	56
Did not attend any student programs but did attend APS meetings within the past two years	56	54	58	55	47	44
Number of respondents	96	266	326	362	277	233

Footnotes:

a) 54 respondents were not included in this table because 46 left the question blank and 8 dropped out of the survey.

- Nearly 70% of graduate student members who were in their first year or have completed one year of graduate study did not attend any APS meetings within the past two years. The converse is true among those who have completed at least three years of graduate study, where nearly three quarters of them had attended one or more APS meetings within the past two years.
- The majority of graduate students who attended APS meetings within the past two years did not attend any student-oriented programs at the meetings. However, among those who have completed at least five years of graduate study, the majority had attended one or more student-oriented programs at APS meetings.

Table 28. Respondents who rated each publication as an important or essential benefit by years of graduate study, only current U.S. graduate students, 2009.

	Years of graduate study completed					
	One or less %	Two %	Three %	Four %	Five %	Six or more %
Physics Today	71	75	67	67	67	68
Free online journal for student members	57	53	49	51	45	46
APS News	37	35	31	30	30	33
Online member directory	25	30	23	22	19	25
APS Weekly Newsbrief	26	22	22	19	18	21
Number of respondents	313	449	475	496	373	321

Footnotes:

a) In Question 5 respondents were asked to rate how important the publications were on a scale from 1 to 5, where 1 was “Not at all important”, 2 was “Somewhat important,” 3 was “Important,” 4 was “Essential,” and 5 was “Don’t know.” The percentages in this table represent those who chose 3 or 4.

b) Respondents who skipped a statement were counted as 5 “Don’t know.”

c) 23 respondents were not included in this table because 6 left the entire question blank and 17 dropped out of the survey.

- Students in their first two years of graduate school appear to value “free on line journals for students” somewhat more than do students who have completed 5 or more years of study.

Table 29. Citizenship status by years of graduate study, only current U.S. graduate students, 2009.

	Years of graduate study completed					
	One or less %	Two %	Three %	Four %	Five %	Six or more %
US citizen	49	44	46	49	50	51
Permanent US visa	5	4	3	3	6	6
Temporary US visa	46	52	51	48	44	43
Number of respondents	302	432	448	481	366	316

Footnotes:

a) In Question 15 respondents could only check one item.

b) 105 respondents were not included in this table because 2 left the question blank and 103 dropped out of the survey.

- Citizenship status remained consistent regardless of year of graduate study.
- Non-US citizens who have completed 2 or 3 years of study appear to be over-represented among APS student members compared to the graduate student population as surveyed by AIP.

Table 30. Respondents who rated each member service as important or essential by years of graduate study, only current U.S. graduate students, 2009.

	Years of graduate study completed					
	One or less %	Two %	Three %	Four %	Five %	Six or more %
Attend APS meetings at reduced rates	75	84	88	88	89	88
Online Career Center	58	61	61	67	71	73
Career Webpage	54	60	60	63	68	71
Assistance with international travel issues	41	38	36	36	32	34
Tools for grassroots lobbying efforts	28	26	27	22	25	24
Auto insurance (GEICO)	26	25	21	22	16	20
Participate in FGSA activities	28	23	22	18	17	19
Email alias	22	22	21	20	17	18
Group life insurance	21	18	16	16	12	15
Number of respondents	308	442	465	490	367	320

Footnotes:

a) In Question 6 respondents were asked to rate how important the member services were on a scale from 1 to 5, where 1 was “Not at all important”, 2 was “Somewhat important,” 3 was “Important,” 4 was “Essential,” and 5 was “Don’t know.” The percentages in this table represent those who chose 3 or 4.

b) Respondents that skipped a statement were counted as 5 “Don’t know.”

c) 58 respondents were not included in this table because 19 left the question blank and 39 dropped out of the survey.

- The importance of employment-related benefits (online career center and career webpage) increased each year of graduate study.

Table 31. Awareness of the following student resources on the APS website by years of graduate study, only current U.S. graduate students, 2009.

	Years of graduate study completed					
	One or less %	Two %	Three %	Four %	Five %	Six or more %
Online career center	39	33	33	34	51	57
APS meetings advice & tips	35	37	39	31	33	35
Career guidance for students	29	23	21	25	30	34
Scholarship and fellowship information	30	23	23	24	22	25
Dedicated page for students	26	20	18	18	15	16
Info on female-friendly graduate programs	19	17	14	12	14	11
Number of respondents	300	433	454	477	362	317

Footnotes:

a) In Question 9 respondents were asked to rate how aware they were about the member services on a scale from 1 to 5, where 1 was “Very aware”, 2 was “Aware,” 3 was “Somewhat aware,” 4 was “Not aware.” The percentages in this table represent those who chose 1 or 2.

b) Respondents that skipped an item were counted as 4 “Not aware.”

c) 107 respondents were not included in this table because 36 left the question blank and 71 dropped out of the survey.

- Similar to how graduate students reported the increase in the importance of employment-related benefits through their graduate study, their awareness of the APS online career center increased throughout their graduate study. However, the awareness of APS career guidance for students was higher among entering students and those who had completed 5 years of study.
- The awareness of scholarship and fellowship information, the dedicated page for students, and information on female-friendly graduate programs was somewhat higher among student member in their early graduate study than among those in the latter stages of their graduate study. These types of information are more important to students when they are applying to graduate programs and thus are higher on the radar of students who are early in the graduate school stage of their careers.

Table 32. Extent to which students feel a close connection with APS units by years of graduate study, only current U.S. graduate students, 2009.

	Years of graduate study completed					
	One or less %	Two %	Three %	Four %	Five %	Six or more %
Do not belong to any APS units	19	21	21	16	17	13
Not at all connected	29	24	26	27	30	25
Somewhat connected	39	41	41	40	38	45
Connected fairly well	10	11	9	12	9	10
Very closely connected	3	3	3	5	6	7
Number of respondents	311	440	462	490	371	318

Footnotes:

a) In Question 8 respondents could only check one item.

b) 58 respondents were not included in this table because 12 left the question blank and 46 dropped out of the survey.

- The feeling of connectedness between the graduate students and APS units remained the same regardless of year of graduate study.