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PHYSICS AND ASTRONOMY SENIOR REPORT: CLASS OF 2003

HIGHLIGHTS

- Almost three-fourths of the physics seniors indicated that they had participated in some type of undergraduate research project (**Table 1**).
- Over a third of the physics seniors and almost half of the astronomy seniors indicated they would graduate with a double major. This compares to only 5% for all bachelor's degree recipients (**Table 4**).
- Sixty-three percent of graduating physics seniors received their bachelor's degrees four years after graduating from high school. This compares to a third of all bachelor's (**Page 4**).
- The primary reasons students gave for choosing their undergraduate institution were reputation and location (**Figure 3**).
- Physics seniors who had participated in an undergraduate research project were 3 times more likely to plan to immediately continue with physics or astronomy graduate study than students who had not (see **Table 6**).
- The plans of physics seniors have shifted in recent years, with a larger percentage choosing to pursue graduate studies in physics or astronomy immediately after receiving their degree (see **Figure 5**).
- Forty-one percent of physics seniors have a long-term goal of securing an academic position at a college or university. A similar proportion of astronomy seniors had the same aspirations (see **Table 7 and 8**).
- When asked if they would major in physics again if given the opportunity, 72% answered with a definite yes and an additional 21% were unsure (see **Figure 8**).

Table 1. Types of research experiences taken by 2003 physics seniors.

	%
Non-thesis department research project	37
As part of a thesis	28
REU (1)	26
Non-dept employment	25
Co-op or Internship	13
None	29

(1) National Science Foundation funded: Research Experience for Undergraduates.

Note: Percentages add to more than 100% because respondents were allowed to choose more than one type of research.

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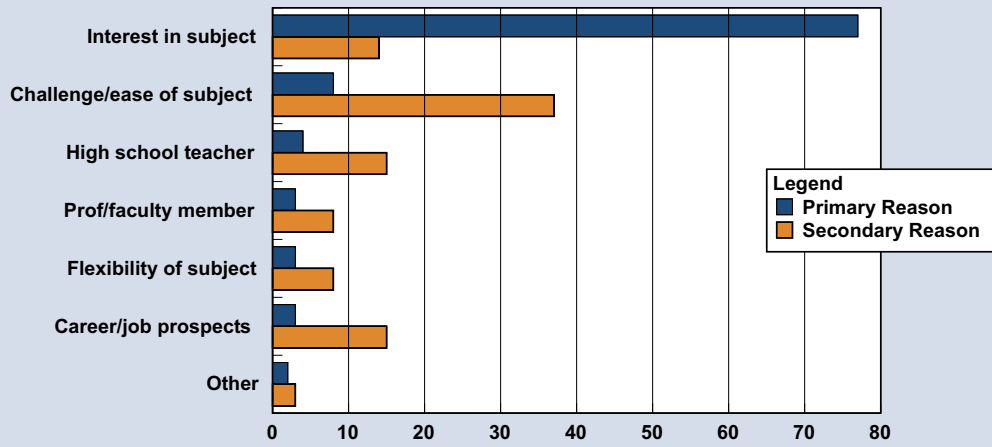
Table 4. Double majors, 2003 physics seniors.

Physics seniors with a double major	37%
Other major for physics seniors	%
Mathematics	43
Engineering	12
Astronomy	10
Computer Science	8
Chemistry	5
Philosophy & Theology	4
Music & Fine arts	3
Other	15

Note: For comparison, in 2003 5% of all bachelor's received a double major. (NCES)

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Figure 3. Primary and secondary reasons for choosing to major in physics, 2003 physics seniors.



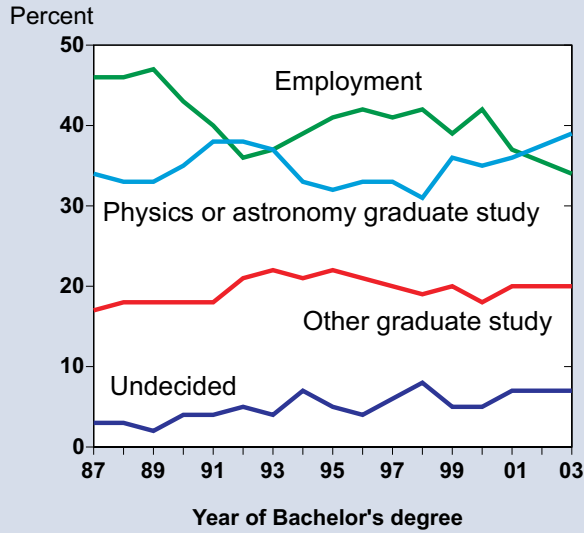
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Table 6. Postbaccalaureate plans by research project participation, seniors class of 2003

Participated in undergraduate research	Postbaccalaureate +plans				
	Graduate Study		Employment	Undecided	
	Physics or Astronomy	Other Fields			
Yes	48	19	27	6	100%
No	16	24	49	11	100%
Overall	39	20	34	7	100%

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Figure 5. Postbaccalaureate plans of physics bachelors, 1987 to 2003.



Note: Survey was not conducted for the class of 2002.

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Table 7. First choice of long-term career goals by initial postbaccalaureate plans, 2003 physics seniors.

Career Goal	Postbaccalaureate Plans			Overall
	Graduate Study		Employment	
	Physics or Astronomy	Other Fields		
College or University teaching and research	72	23	17	41
Engineering position	5	28	18	15
Other science or technical position	20	25	33	26
Pre-college teaching	1	7	9	5
Military	1	1	11	4
Other positions (non-science)	1	16	12	9
	100%	100%	100%	100%

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Table 8. First choice of long-term career goals, 2003 astronomy seniors.	
Career Goal	%
College or University teaching and research	43
Engineering position	4
Other science or technical position	24
Pre-college teaching	5
Military	10
Other positions (non-science)	14
	100%

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