Initial Employment
Physics Degree Recipients

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Acknowledgements

Statistical Department

Center Staff

- Starr Nicholson
- Administrators
- Jack Pold
- Faculty / Advisors
- Shirley Wilson
- Mark McFarling
What are the common career paths of physics degree recipients?

Initial employment
Bachelors’
Master’s
PhDs
Physics Bachelor’s
Physics Bachelor’s Degrees Awarded

Number

Class of

55  63  73  83  93  03  13

American Institute of Physics

2015 Chairs Conference
June 7th, 2015
Status of Physics Bachelor's One Year After Degree.
Initial Employment Sectors of Physics Bachelor’s.
Classes of 2011 & 2012 Combined

- Private Sector: 61%
- College & University: 13%
- High School: 8%
- Other: 7%
- Active Military: 6%
- Civilian Gov’t, National Lab: 5%
Field of Employment for Physics Bachelor’s in the Private Sector, Classes of 2011 & 2012 Combined.

- Engineering: 30%
- Computer or Information Systems: 24%
- Non-STEM: 30%
- Other STEM: 13%
- Physics or Astronomy: 3%
Knowledge and Skills Regularly Used by Physics Bachelor’s Employed in the Private Sector.
Who is Hiring Physics Bachelor's?
Employers who hired physics bachelor's by state (click on desired state)
Maryland employers who recently hired new physics bachelor recipients

- a.i. solutions
- ADNET Systems, Inc.
- Alion Science and Technology
- American Electronic Warfare Associates
- American Institute of Physics
- ARES Technical Corporation
- Bishop Claggett Center
- Carnegie Institution for Science
- Chuck Niglio & Son
- CREAM Lab
- Department of Defense
- Dixon Valve and Coupling Company
- EMC
- EMMES Corporation
- Federal Aviation Administration
- GEICO
- HCRI
- Johns Hopkins Applied Physics Laboratory
- Johns Hopkins Center for Advanced Modeling
- Johns Hopkins University School of Medicine
- M&T Bank
- Maryland Environmental Service
- NASA
- National Institute of Standards and Technology
- National Institutes of Health
- Navair
- Oak Ridge Institute for Science and Education
- Plymouth Tube
- Public Safety Systems, Inc.
- Raytheon
- S.S Papadopoulos & Associates, Inc.
- SABRE Systems
- SAIC
- Sigma Space Corporation
- Space Telescope Science Institute
- Systems Engineering Group, Inc.
- Technology Service Corporation
- Transamerica Life and Protection
- US Army Research Laboratory
- US Food and Drug Administration
- Wyle
Exiting Physics Master’s
Physics Master’s Degrees Conferred by Type of Degree and Department, 1985 through 2014

- **Master's Exiting from PhD Departments**
- **Master's Exiting from Master's Departments**

Legend:
- Blue line: Master's Exiting from PhD Departments
- Orange line: Master's Exiting from Master's Departments

Diagram shows the number of master's degrees conferred annually from 1985 to 2014, with two trends indicated:
- Steady increase and decrease
- Significant peak around 1996

**Axes:**
- X-axis: Degree Year (1985 to 2014)
- Y-axis: Number of Degrees (0 to 800)

Data source: American Institute of Physics
Status of Exiting Physics Master’s One Year After Degree
Sector of Employment of Exiting Physics Master’s One Year After Degree

- Private Sector: 44%
- College or University: 23%
- Government: 11%
- High School Teachers: 10%
- Active Military*: 2%
- Other: 10%

Percent
Field of Employment of Exiting Physics Master’s Working in the Private Sector One Year After Degree

Physics PhDs
Physics PhDs Conferred in the U.S., 1900 through 2013

Number

Degree Year

Total
U.S. Citizens
Non-U.S. Citizens
Initial Employment of Physics PhDs

- Potential Permanent Position
- Postdoc
- Other Temporary Position
- Unemployed

Academic Year

Percent

AIP American Institute of Physics

2015 Chairs Conference
June 7th, 2015
### Sector of Employment for New Physics PhDs

Classes of 2011 & 2012 Combined

<table>
<thead>
<tr>
<th>Sector of Employment</th>
<th>Postdoc %</th>
<th>Potentially Permanent %</th>
<th>Other Temporary %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic*</td>
<td>74</td>
<td>22</td>
<td>78</td>
</tr>
<tr>
<td>Private</td>
<td>1</td>
<td>64</td>
<td>14</td>
</tr>
<tr>
<td>Government</td>
<td>21</td>
<td>11</td>
<td>4</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

| Total                | 100%      | 100%                    | 100%              |
Field of Employment for New Physics PhDs

Classes of 2011 & 2012 Combined

<table>
<thead>
<tr>
<th>Category</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering</td>
<td>14</td>
</tr>
<tr>
<td>Computer software</td>
<td>11</td>
</tr>
<tr>
<td>Business or Finance</td>
<td>7</td>
</tr>
<tr>
<td>Other sciences</td>
<td>4</td>
</tr>
<tr>
<td>Education</td>
<td>2</td>
</tr>
<tr>
<td>Medical services</td>
<td>1</td>
</tr>
<tr>
<td>Other</td>
<td>5</td>
</tr>
</tbody>
</table>

Legend:
- Employment primarily in other fields
- Employment in physics - different subfield from dissertation
- Employment in physics - same subfield from dissertation
<table>
<thead>
<tr>
<th>Position</th>
<th>Highest Degree Awarded</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PhD (%)</td>
</tr>
<tr>
<td>Postdoc</td>
<td>54</td>
</tr>
<tr>
<td>Research Scientist</td>
<td>24</td>
</tr>
<tr>
<td>Tenured or Tenure-Track Professor</td>
<td>20</td>
</tr>
<tr>
<td>Graduate Student</td>
<td>1</td>
</tr>
<tr>
<td>Adjunct, Part-time, or Visiting Faculty</td>
<td>1</td>
</tr>
</tbody>
</table>

*Includes permanent non-tenured faculty at schools without tenure. (Only the 5 most common categories of previous position are shown.)

http://www.aip.org/statistics
### Academic Background of New Physics Faculty, 2007-08 for Tenured and Tenure-Track Hires*

<table>
<thead>
<tr>
<th>Highest Degree Awarded</th>
<th>PhD (%)</th>
<th>Bachelor’s (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earned PhD in US within last 5 years</td>
<td>44</td>
<td>55</td>
</tr>
<tr>
<td>Earned PhD outside US, any year</td>
<td>30</td>
<td>16</td>
</tr>
<tr>
<td>Earned PhD in US &gt; 5 years ago; prior academic employment</td>
<td>22</td>
<td>29</td>
</tr>
<tr>
<td>Earned PhD in US &gt; 5 years ago; prior employment outside academia</td>
<td>5</td>
<td>1</td>
</tr>
</tbody>
</table>

*Includes permanent non-tenured faculty at schools without tenure.

http://www.aip.org/statistics
e-Updates - data alert service

http://www.aip.org/statistics/e_updates