“The Current Employment Situation for Graduate Degree Recipients by Discipline.”

Physics

Council of Graduate Schools
February 18, 2009

Patrick Mulvey
Statistical Research Center
American Institute of Physics
pmulvey@aip.org
Number of physics PhD's conferred in the United States, 1900 to 2007.

Sources: ACE (1900-1919), NAS (1920-1961), AIP (1962-2007)
AIP Statistical Research Center, Enrollments and Degrees Report.
Master’s degrees conferred by type of degree and department, 1977-2007.

US Citizens
- Graduate Study, Physics or Astronomy*: 19
- Employment: 9
- Graduate Study, Other Fields: 66
- Unemployment: 6

Foreign Citizens
- Graduate Study, Physics or Astronomy*: 48
- Employment: 28
- Graduate Study, Other Fields: 20
- Unemployment: 4

Overall
- Graduate Study, Physics or Astronomy*: 30
- Employment: 15
- Graduate Study, Other Fields: 50
- Unemployment: 5

* At a different department from the one where they received their Master's degree.


- Private Sector: 43
- College or University: 21
- Civilian Government: 13
- High School: 12
- Military: 8
- Other: 3

Initial employment of physics PhD’s, 1979-2006

Academic Year

Percent

Postdoc

Potentially Permanent Position

Other Temporary Position

Unemployed

70
60
50
40
30
20
10
0
79 81 83 85 87 89 91 93 95 97 99 01 03 2006
<table>
<thead>
<tr>
<th>Type of Position</th>
<th>Potentially Permanent %</th>
<th>Postdoc %</th>
<th>Other Temporary %</th>
<th>Overall %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic*</td>
<td>29</td>
<td>75</td>
<td>68</td>
<td>61</td>
</tr>
<tr>
<td>Private Sector</td>
<td>60</td>
<td>1</td>
<td>13</td>
<td>19</td>
</tr>
<tr>
<td>Government</td>
<td>10</td>
<td>22</td>
<td>12</td>
<td>17</td>
</tr>
<tr>
<td>Nonprofit</td>
<td>1</td>
<td>2</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Other</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

* Includes University Affiliated Research Institutes

*Statistical Research Center, Initial Employment Report*
### Employer Type in 2001 by Year of Physics PhD

<table>
<thead>
<tr>
<th>PhD Year</th>
<th>Industry %</th>
<th>Academe %</th>
<th>Hospital %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996-2000</td>
<td>46</td>
<td>40</td>
<td>13</td>
</tr>
<tr>
<td>1991-1995</td>
<td>54</td>
<td>30</td>
<td>15</td>
</tr>
<tr>
<td>1986-1990</td>
<td>41</td>
<td>36</td>
<td>21</td>
</tr>
<tr>
<td>1981-1985</td>
<td>47</td>
<td>34</td>
<td>18</td>
</tr>
<tr>
<td>1976-1980</td>
<td>46</td>
<td>28</td>
<td>26</td>
</tr>
<tr>
<td>1971-1975</td>
<td>45</td>
<td>31</td>
<td>23</td>
</tr>
<tr>
<td>1970 &amp; earlier</td>
<td>37</td>
<td>44</td>
<td>18</td>
</tr>
</tbody>
</table>

Source: NSF Survey of Doctoral Recipients
Industrial Employers with the most PhD Physicists, 2004

Science Applications International Corporation
IBM
General Atomics
Lucent Technologies
Eastman Kodak
General Electric
Varian
Raytheon
Corning
Bechtel

These industrial employers account for 20% of respondents who are PhD physicists employed in the private sector, reside in the U.S. and are members of at least one of the AIP Member Societies. AAPM members received a different version of the survey and were not asked to disclose their employer name. Therefore, their employers are not represented in this table.

## Background of New Physics Faculty, 2006.*

<table>
<thead>
<tr>
<th>Type of Department</th>
<th>PhD (%)</th>
<th>Bach (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earned PhD in US within last 5 years</td>
<td>31.5</td>
<td>62</td>
</tr>
<tr>
<td>Earned PhD outside US, any year</td>
<td>34.5</td>
<td>13</td>
</tr>
<tr>
<td>Earned PhD in US &gt; 5 years ago</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Previous Employer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>US Academic Institution</td>
<td>27.4</td>
<td>20.4</td>
</tr>
<tr>
<td>Industry, National Lab, Other</td>
<td>6.6</td>
<td>4.6</td>
</tr>
</tbody>
</table>

*AIP Statistical Research Center: 2006 AWF Survey

*Includes permanent non-tenured faculty at schools without tenure, and tenured and tenure-track faculty at other schools.