



The Center for
**BRIGHT
BEAMS**
A National Science Foundation
Science & Technology Center

Shaping Your Future with
Physics:

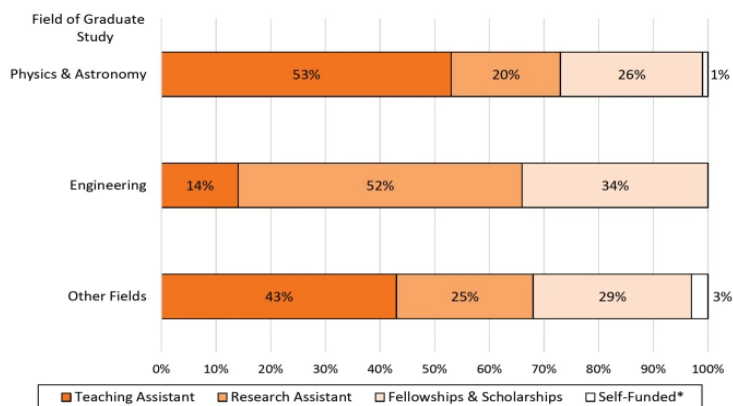
Career Pathways and
Potential

Do you need a Masters Degree before PhD?



Paying for Graduate School

Primary Types of Financial Support for Physics Bachelors Enrolled in a PhD Program One Year After Degree, Classes of 2019 and 2020 Combined



Other Fields does not include professional degree fields such as law and medicine.

* Includes family assistance, loans, and wages.



aip.org/statistics

Graduate School Expenses Covered!

- Physics PhD students receive full financial support while pursuing their degrees.
- This typically includes a stipend, tuition coverage, and health insurance.



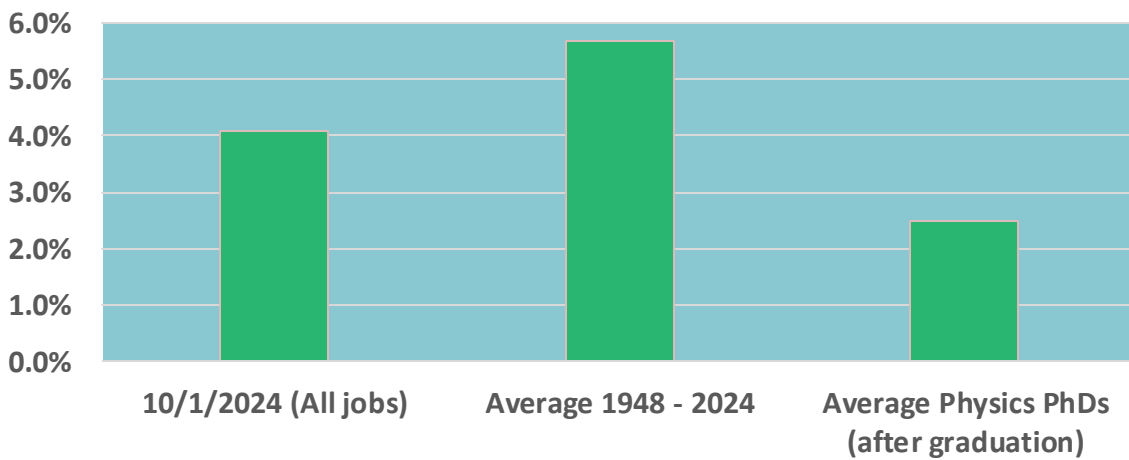
Why Physics?

High Demand!

Low Unemployment

97.5% of physics PhDs are employed the winter after receiving degree

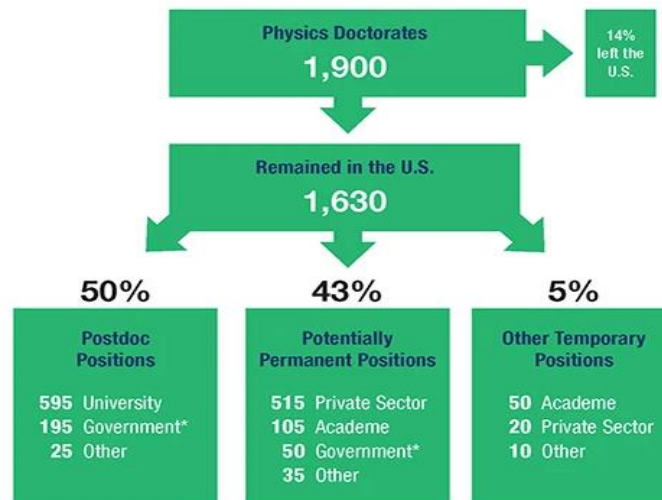
Unemployment Rate



AIP PHYSICS TRENDS

Fall 2023

Physics PhDs 1 Year Later



Common Job Titles for Physics Bachelors

Salary

Engineering
 Systems Engineer
 Engineering Technician
 Electrical Engineer
 Project Engineer
 Mechanical Engineer
 Test Engineer
 Process Engineer
 Production Engineer
 Design Engineer
 Manufacturing Engineer
 Application Engineer
 Data Engineer
 Scientist

Research and Technical
 Research Assistant
 Researcher
 Research Technician
 Junior Specialist
 Patent Examiner
 Accelerator Operator
 Physicist
 Scientist

Education
 High School Physics Teacher
 High School Math Teacher
 Middle School Science Teacher
 Tutor

Programming/Software
 Software Engineer
 Software Developer
 Application Developer
 Data Engineer
 Data Analyst
 Data Scientist
 Machine Learning Engineer
 Consultant

Finance/Business
 Data Analyst
 Research Analyst
 Project Manager
 Investment Banker

The salary of an Accelerator Physicist with a PhD

Based on Years of Experience

Early-career:

\$80,000–\$110,000

Mid-career (5–10 years):

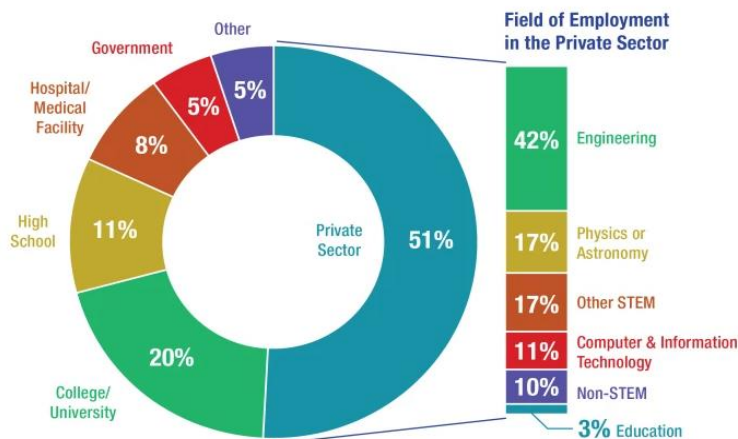
\$100,000–\$140,000

Senior-level (10+ years):

\$130,000–\$180,000+

Ranges vary based on the type of employer (national labs, universities, private sector)

Employment for New Physics Masters One Year After Degree



Employers Who Recently Hired Three or More New Physics Bachelors

- | | | |
|------------------------------------|--|--|
| Accenture | Eurofins | Microsoft |
| Actelnet | Facebook | MIT Lincoln Laboratory |
| Aerotek | FDM Group | Mitre |
| Amazon | Fermi National Accelerator Laboratory | NASA |
| American Physical Society | Fidelity Investments | National Institutes of Health |
| Apex Systems | First solar | NAVAIR |
| Apple | GE | Naval Nuclear Laboratory |
| Applied Materials | Genentech | Naval Oceanographic Office |
| Arete Associates | General Dynamics Electric Boat | Naval Surface Warfare Center Dahlgren Division |
| Argonne National Laboratory | General Motors | Newgrange Design |
| ASML | Genesis10 | Northrop Grumman |
| ASRC Federal | GenTex Corporation | Open Systems International |
| AT&T | Goldman Sachs | Oracle |
| Axient | Google | ORISE |
| Bank of America Merrill Lynch | Harvard Smithsonian Center for Astrophysics | Palantir Technologies |
| Baylor Scott and White Healthcare | Honeywell | Peraton |
| Belcan | HRL Laboratories | Photonics Industries International |
| Benchmark Electronics | IBA | PPD |
| Bloomberg | IBM | Quality Electrodynamics |
| Blue Origin | Infosys | Randstad |
| BNY Mellon | Intel | Raytheon |
| Boeing | IPG Photonics | Revature |
| Booz Allen Hamilton | Johns Hopkins University Applied Physics Lab | Rigetti Computing |
| Bridger Photonics | JPMorgan Chase | SAC |
| Brigham and Women's Hospital | KBWyle | SciTec |
| Broad Institute of MIT and Harvard | Keysight Technologies | Seagate Technology |
| Brookhaven National Laboratory | KPMG | SLAC National Laboratory |
| C2 Education | L3Harris | Space Telescope Science Institute |
| CACI | Laboratory for Laser Energetics | SpaceX |
| Capital One | Las Cumbres Observatory | SRC, Inc. |
| Cisco | Lawrence Berkeley National Laboratory | Stryker |
| Cleveland Clinic | Lawrence Livermore National Laboratory | Tesla |
| Collins Aerospace | Leidos | The Aerospace Corporation |
| Corning Inc. | Lockheed Martin | The Boston Consulting Group |
| Credit Suisse | Loma Linda University Medical Center | Thermo Fisher |
| Darktrace | Los Alamos Observatory | Thorlabs |
| DC Energy | MACOM | U.S. Bank |
| Deloitte | Manpower | US Air Force |
| Department of Defense | Massachusetts General Hospital | US ARMY |
| Dynetics, Inc. | Mayo Clinic | US Government |
| Eaton | McKinsey & Company | US Navy |
| Edmund Optics | Medtronic | USPTO |
| Epic Systems | Micron | Wells Fargo |

This employer list comes from responses to AIP Statistical Research's Bachelor's Follow-up Survey, classes 2018 through 2022. The list is limited to employers who hired new physics bachelors into technical positions. The list does not include bachelors employed at high schools, colleges, and universities or individuals enlisted in branches of the US military. It does include civilians employed by the branches of the US military.