

# PHYSICS / ASTRONOMY

## What can I do with a PhD in Physics or Astronomy?

Physicists explore and identify basic principles and laws governing the motion, energy, structure, and interactions of matter. Astronomers use the principles of physics and mathematics to learn about the fundamental nature of the universe.

Physicists and Astronomers with Ph.D.s held about 18,000 jobs in 2006. Most jobs are in **basic research**, which usually requires a doctoral degree.

Typical starting salaries in the private sector: Physics Ph.D.'s » \$80,000 per year while Physics Bachelor's » \$45,000 per year (2003 data).

About 38% of Physicists and Astronomers work for **scientific research and development** services firms.

There are openings for Physicists and Astronomers in many scientific areas of work including **computing, biological sciences, and engineering**.

Physicists and Astronomers can also pursue careers in a variety of "nontraditional" disciplines that include **medicine, law, business, technical writing**, and more!

## What does CWU's Physics Department have to offer?

- The **McNair Scholar Program**
- **Research opportunities available to all physics majors**, which will help you build your graduate school resume and gain valuable research experience.
- The opportunity to present scholarly research at CWU's SOURCE event.
- A **Science Honors** program that enables a student to design, execute, and present a research project at a professional conference.
- The **Science Talent Expansion Program** (STEP), which focuses on increasing the number of underrepresented students obtaining STEM (Science, Technology, Engineering, and Mathematics) degrees at CWU.

### Helpful Links:

American Institute of Physics

<http://www.aip.org/>

American Astronomical Society

<http://aas.org/>

\* Thanks to Dr. Mike Jackson for providing some

## Featured Ph.D. Holder: Ronald E. McNair



**“Before you can make a dream come true, you must first have one.”**

Ronald E. McNair, in whose honor the post-baccalaureate achievement program was created, held a doctorate degree in Physics from MIT and was recruited by NASA in 1978. Dr. McNair perished in the tragic Challenger Space Shuttle explosion in 1986 at the age of 35. He was awarded the Congressional Space Medal of Honor and the McNair crater, on the moon, is named in his honor.

Dr. McNair's lifelong commitment was to inspire and encourage students to dream big, work hard and accomplish their goals. As a crusader for education, he spoke before the Massachusetts State Legislature proclaiming “I believe that in our urban and rural cities there are great minds and talents with hands that can control a spacecraft with the same dexterity that they control and handle a basketball. These talents must not be wasted.”

\*excerpted from <http://www.ronaldmcnair.org/>