

What is Physics?

- Physics comes from the Greek word, *physis*, which means nature.
- Physics is a *natural science* and the most basic of all sciences.
- Physics is a special way to look at nature and to study the order and interconnectedness of everything around us!



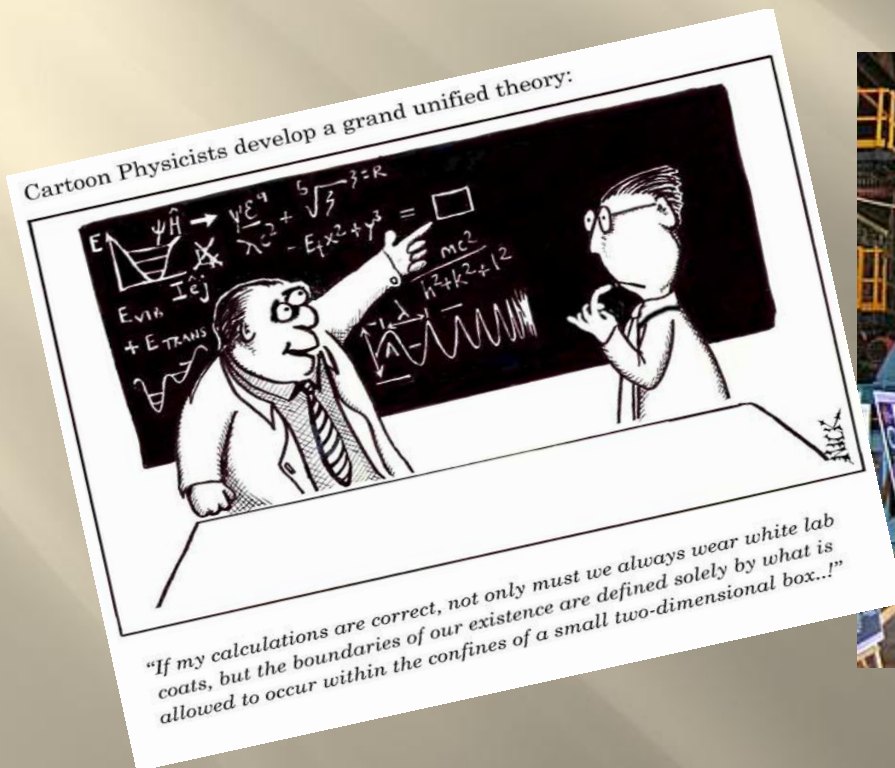
...What is Physics?

- Physics is the study of matter & energy.
- Matter is the stuff in the universe that has mass and volume, like solids, liquids, gasses, and you and me!
- Energy includes motion, heat, light, sound, forces, and elementary particles.
- Physics is responsible for the interpretation of fundamental physical processes which support many other scientific disciplines.



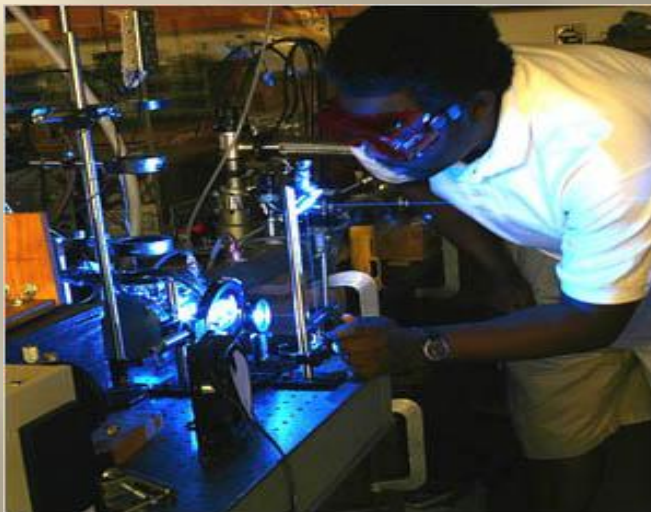
What does a Physicist do?

- Physicists perform experiments and develop theories to explain the basic laws of nature and make use of these ideas to design and develop new technologies.



Why should I study physics?

- We are all natural scientists.
- We marvel at the wonders of nature.
- We observe and we collect objects.
- We wonder why things are the way they are and what makes them work.



...Why should I study physics?

- If you are naturally curious and want to learn about the basic principles that underlie nature, and the beauty of the universe, you should study physics.
- Physics uses a mathematical approach to explain these basic principles, so a background in mathematics is important.



What kind of career will I have with a degree from the Department of Physics & Astronomy?

- B.S. General Physics:** graduate studies, industry R&D, government employers, private industry
- B.S. Applied Physics:** industrial positions (particularly in engineering fields), graduate school in areas such as biophysics, computer science, engineering, etc.
- B.S. Pre-medical Physics:** medical school, pharmacy school, industry - R & D in medical instrumentation, graduate school in medical physics, biophysics, physics, biomedical engineering
- B.S. Biomedical Physics:** medical school, pharmacy school, industry - R & D in medical instrumentation, graduate school in medical physics, biophysics, physics, biomedical engineering
- B.A. Physics:** entry-level positions and opportunities to apply to graduate school in the areas of physics, education, law, business, social and physical sciences.
- B.A. Astronomy:** entry-level positions and opportunities to apply to graduate school in the areas of education, law, business, social and physical sciences. May also lead to exciting and rewarding careers at NASA, in scientific journalism, and advanced studies in astronomy and physics.



Want to find out more
about the programs offered by the
Department of Physics & Astronomy?

Contact ...

Dr. Sean Gavin
Undergraduate Physics Advisor
sean@physics.wayne.edu



Stephan's Quintet
Hubblesite.org/gallery/printshop/