





It's Not all Bad News

- Even if you aren't a "professional astronomer" there are still *lots* of other related opportunities
- Most still require at least a MS/MA
- Most pay quite well (~\$60,000/yr)



Becoming a Professional Astronomer

Education

- BS degree in **physics** (4–5 years)
 - Take *all* the **math** you can fit in
 - **CS** courses or **CUGS** in programming
 - Think about the astronomy **minor**
- Go to **Grad School** (5–6 years)
 - Astronomy
 - Physics with a tailored research project

Jobs

- Post-Doc (1–3 years)
 - A temporary, research intense, position
 - At a university or federal lab (e.g., NASA)
 - May have to do a second (or third...)
- Full position
 - Faculty at University (~55%)
 - Research Scientist at University or Lab (~30%)
 - Industry Research (~10%)

What do we do?

Teach physics and astronomy

Computer programming

Collect/analyze data

Write grant proposals

Write journal papers

Public lectures/interviews

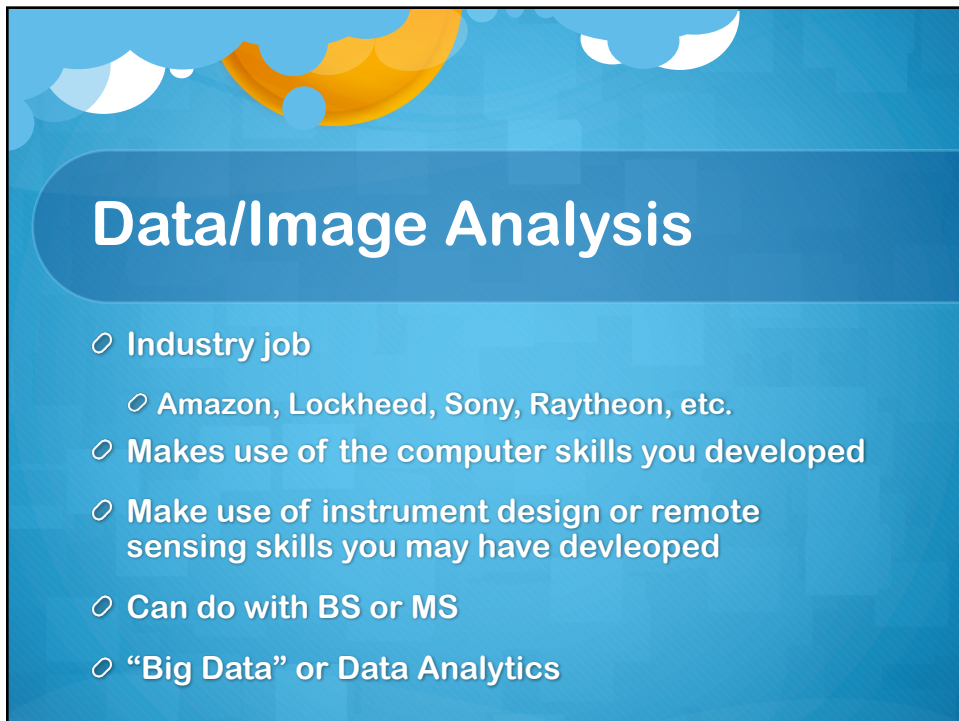
Research

◦ By topic area

- Stellar
- Galactic
- Galaxies
- Cosmology
- Dark Matter/Energy
- Planetary
- Theory

◦ By spectral region

- Radio
- Microwave
- Infrared
- Visible
- UV
- X-ray
- Gamma Ray



Aerospace

- You *are* a physicist after all...
- Industry “engineering” position
 - Lockheed, Boeing, etc.
- Can do with BS or MS

National Observatory

- Support Scientist (PhD)
 - Help researchers plan and execute programs
 - Can become director/admin
- Telescope Operator (MS; BS maybe)
 - Because nobody lets the scientists actually touch the multimillion dollar instrument!
 - Have to like working wonky/changing hours



Instructor/Support

- University or college
- Teach intro level courses and/or labs
- Manage instrumentation and equipment
- Typically requires MS/MA degree



Planetarium/Sci Museum

- University or non-profit institute
- Design exhibits
- Run public events/shows
- Can do with MS/MA

