

# Choosing an Advisor and Beginning Research

GLASS

September 2, 2016

# Choosing an Advisor

- Things to consider:
  - What topics are you interested in?
  - What do *you* need from an advisor?
  - Who has projects/money for you?

# What interests you?

Extragalactic

Clusters,  
spectra

3  
2

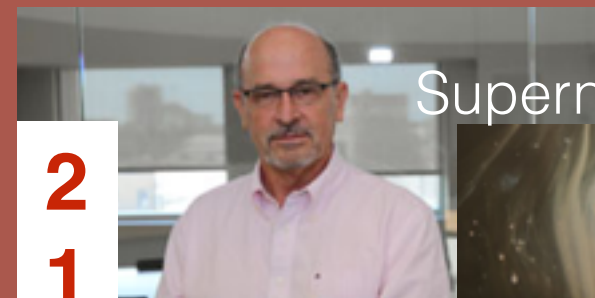


4  
2



All of it.

2  
1

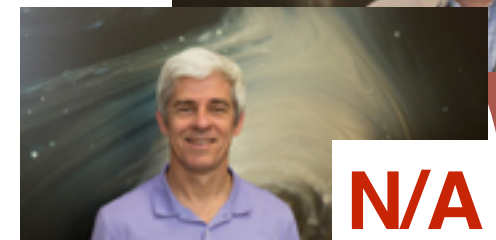


Supernovae

1  
1



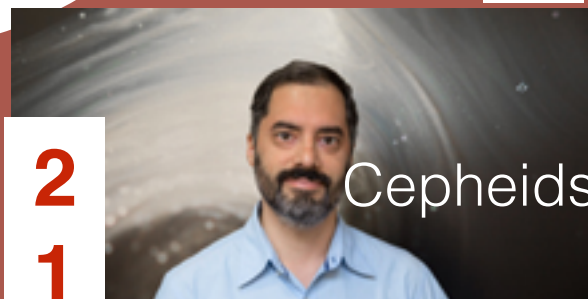
N/A



Transients

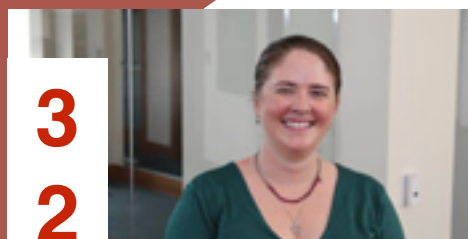
Cepheids

2  
1



RR-Lyrae

3  
2



Galactic

Instrumentation

?



New  
2



Theory/Sims

# What interests you?

- Some postdocs will also take students (need a faculty 'sponsor'):
  - Ryan Quadri - galaxy evolution
  - Peter Brown - supernovae (UV)
  - Jonelle Walsh - SMBHs
  - Meiyu? Luke? Andrew?

# What do *you* need?

- Communication, collaboration, direction  
- OR -  
I work on my own, leave me alone!
- Most of us need a decent amount of assistance/  
direction our first few years, and become more  
independent as we go on.
- Know a potential advisor's availability (physical and  
electronic), update/progress frequency  
expectations.

# Choosing an Advisor

- If you haven't decided yet, set up meetings with professors, attend group meetings, etc.
- Read some papers of a potential advisor to see if the topic interests you.
- Talk to other grad students!
- Always ask questions if you have them.

# Beginning Research

- Usually at the beginning an advisor will point you in a direction / give you a project to start on.
- Read relevant papers (annual reviews, advisor publications, references therein,...)
- Take notes of main ideas, and keep track of what you've done.

# Programming

- Most astronomy research is programming.
- If you don't have much programming experience, learn a language ASAP. Most of us use Python, but if your advisor gives you a bunch of code in e.g. IDL, that'd be good to know.
- Always look for a code that does what you want before rewriting - many astronomy packages are available!



# Keep in mind...

- You can switch if project or advisor isn't working for you... but not too many times!
- While you are taking classes, your priority is to pass them (not necessarily get an A...), but you should make progress on research.
- You are here to do research - it's not always fun, but if you don't enjoy it on the whole, this program may not be for you (and realize that that is perfectly fine).

# Good luck!

- The first bit of time can be tough as you adjust to grad school life.
- Realize that: You are here == you are smart and capable.
- Everyone here wants you to succeed.