

— ASK AN —  
**ASTRONOMER**  
[WWW.ASKANASTRONOMER.ORG](http://WWW.ASKANASTRONOMER.ORG)

askanastronomer.org

# Ask an Astronomer

Curious about Astronomy? Have a burning question about the Universe that you'd like answered? [Ask us!](#) We have answered 26 questions so far.

We are a [team](#) of graduate students, postdocs, researchers and faculty affiliated with the [University of Texas](#) and [McDonald Observatory](#). We welcome questions about Astronomy from K-12 students, teachers and the general public!

[Follow us on Facebook](#)

## Topics



McDonald Observatory's  
**Ask an Astronomer**

**ASK A QUESTION**

All questions  
Black Holes & Cosmology  
Galaxies  
Stars  
Planets & Solar System  
Other  
Frequently asked questions

**About Us**  
**Links**

**Search the archive**

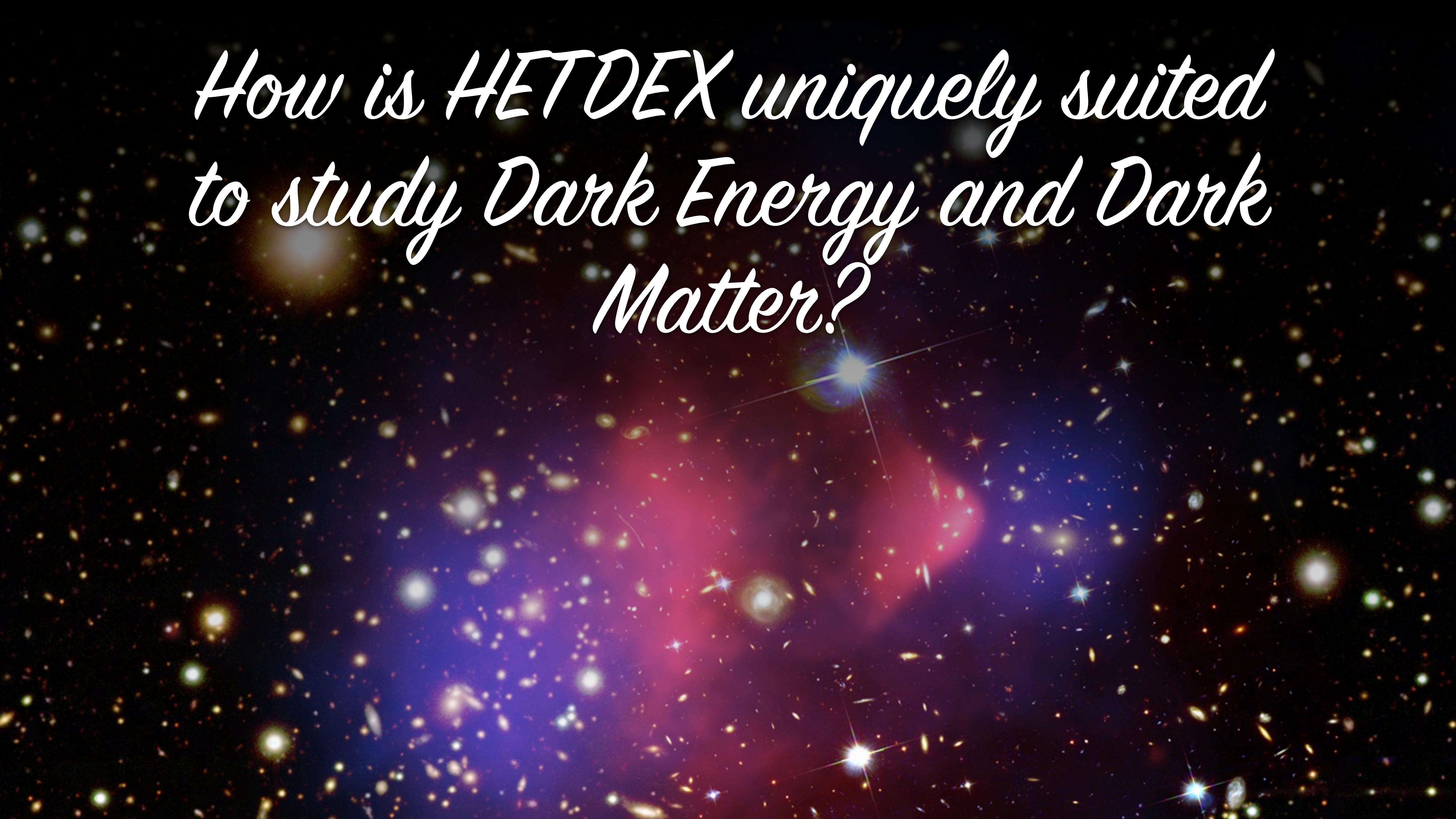
*Can we colonize and terraform Mars?*



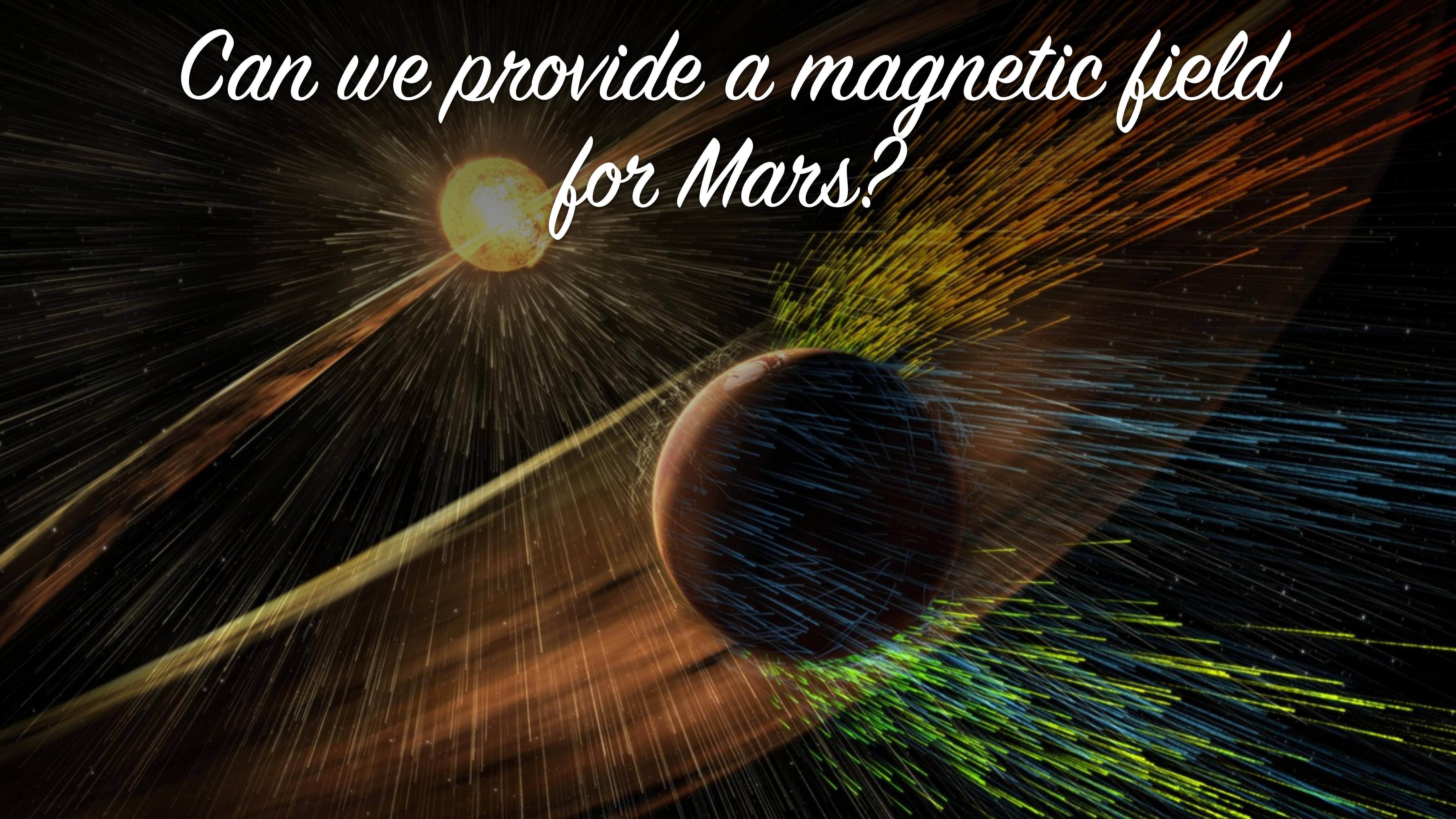
*Is Pluto still a planet?*



*How is HETDEX uniquely suited  
to study Dark Energy and Dark  
Matter?*



*Can we provide a magnetic field  
for Mars?*



# *Do constellations look the same from other planets?*

Gemini

Orion

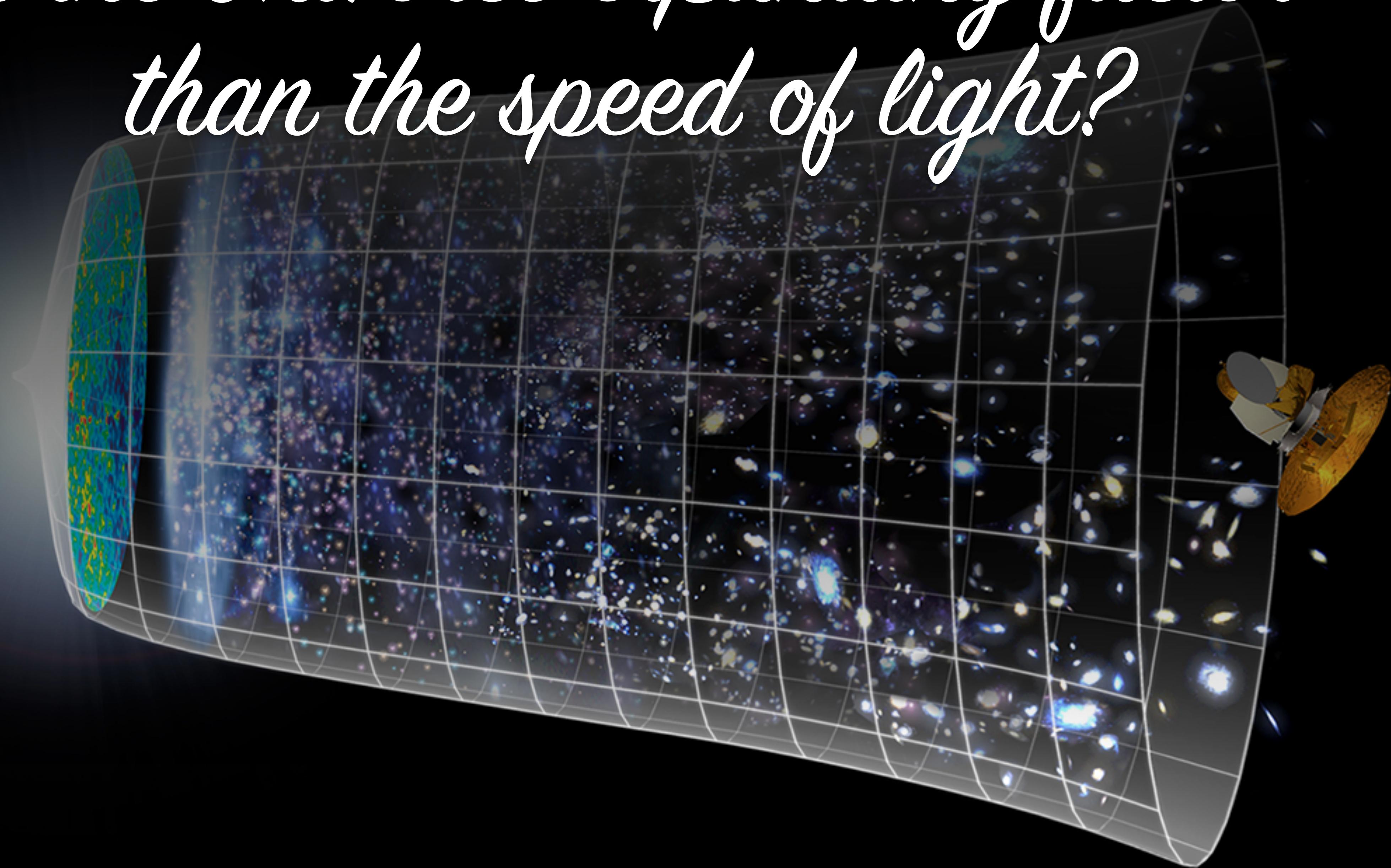
Canis Minor

*How old are small stars?*



*Can you form a planet in one  
day?*

*Is the Universe expanding faster  
than the speed of light?*



*Is the Sun yellow or white?*



*Is Jupiter a failed star?*



*Can we beam radio waves at  
exoplanets?*



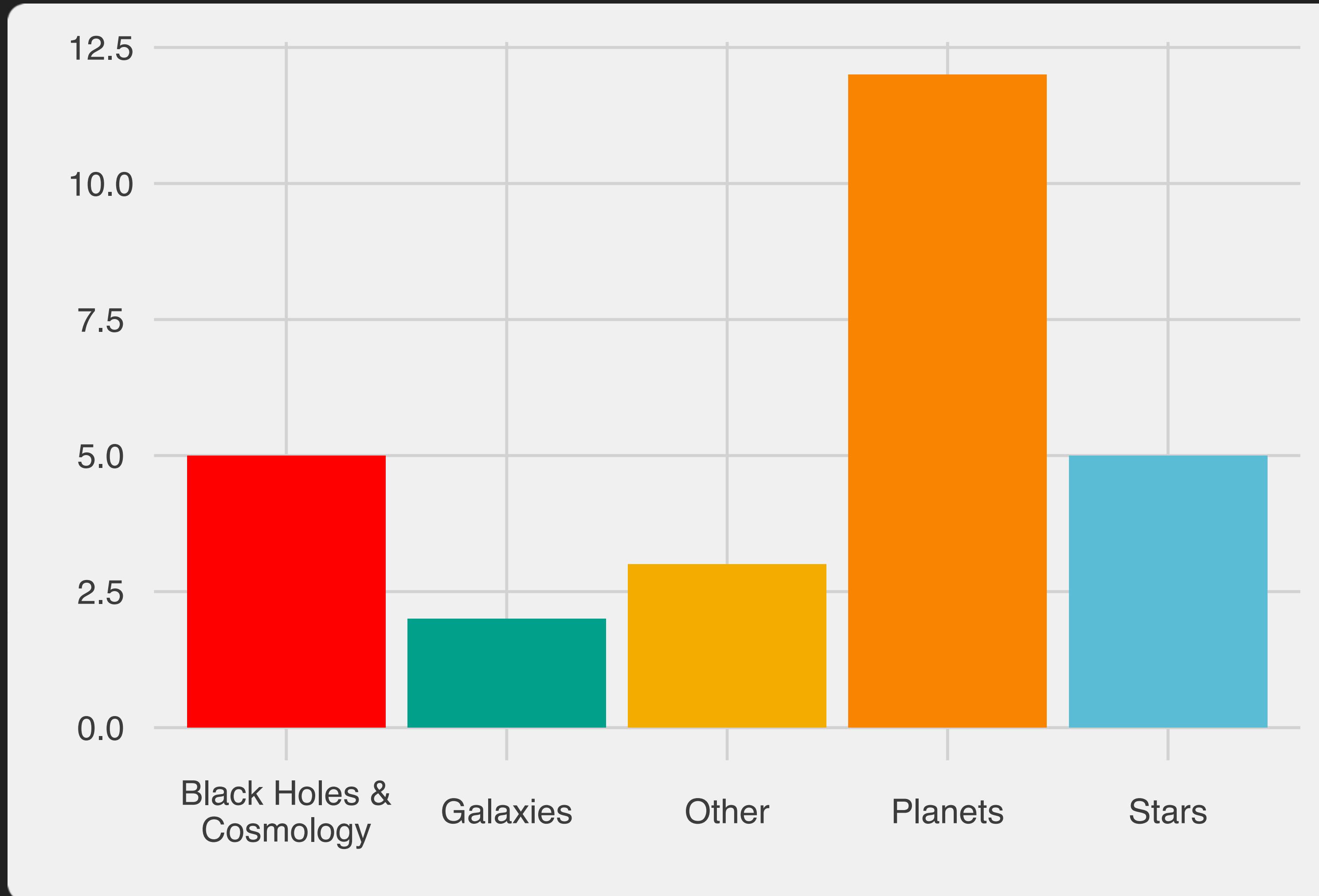
*Do the 100 tons/day of cosmic  
dust accreted change our orbit?*



*Why does the atmosphere of Pluto  
have a blue tint?*



# 26 QUESTIONS ANSWERED



Typical commitment  
for volunteers is  
< 1 answer/month.

Planets win, of  
course, because  
they are awesome.

# 31 VOLUNTEERS

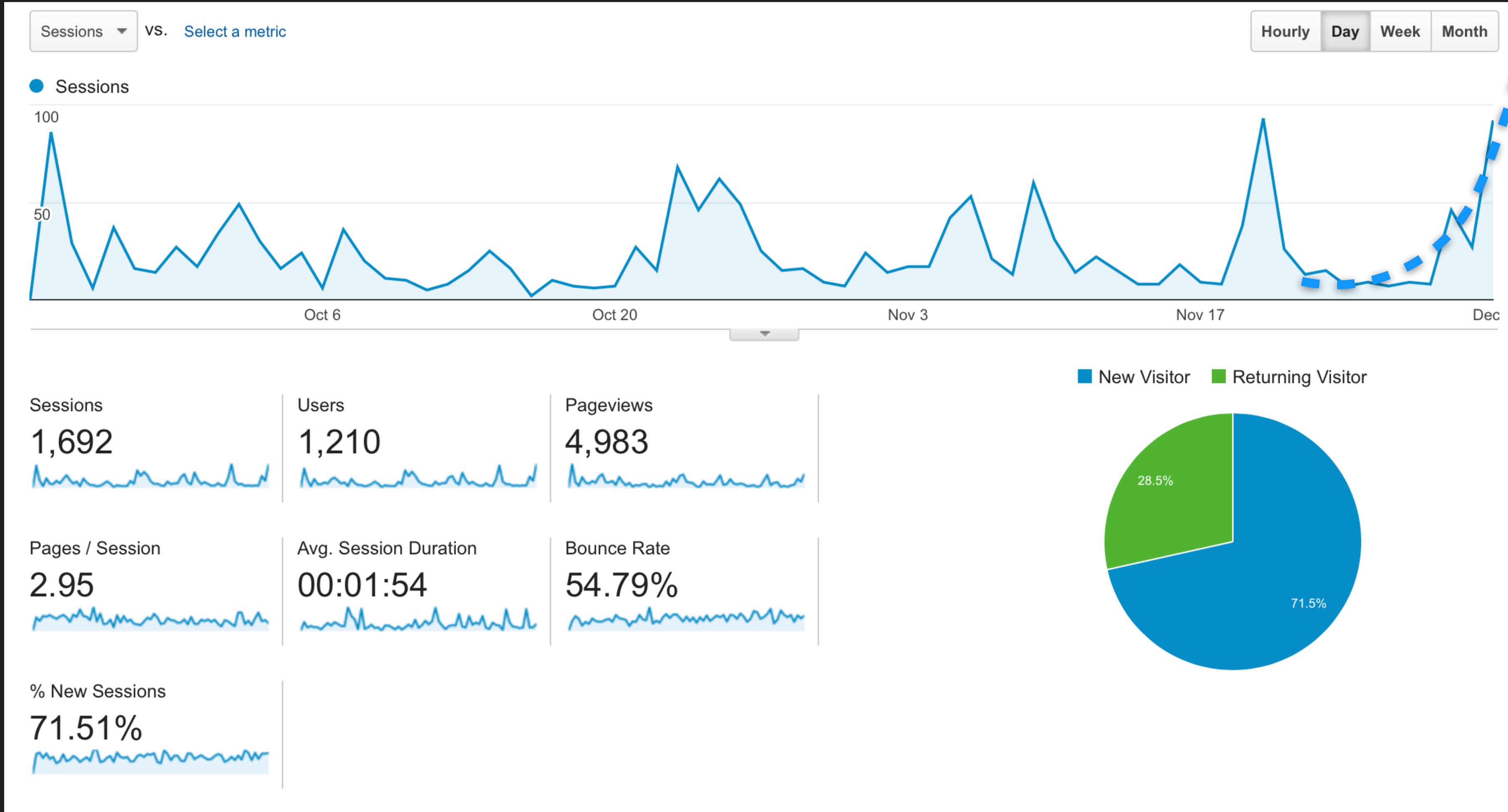
GRADUATE STUDENTS + POSTDOCS + FACULTY + RESEARCHERS + UNDERGRADUATE STUDENTS

- Dr. Monika Adamow (UT)
- Keaton Bell (UT)
- Prof. Augusto Carballido (Baylor University)
- Jim Chandler (Austin Astronomical Society)
- Dr. Tom Crawford (University of Chicago)
- Sam Factor (UT)
- Prof. Steve Finkelstein (UT)
- Dr. Natalie Gosnell (UT)
- Briana Indahl (UT)
- Marshall C. Johnson (UT)
- Dr. Hwihiyun Kim (UT)
- Prof. Adam Kraus (UT)
- Dr. Rachael Livermore (UT)
- Dr. Gregory Mace (UT)
- Dr. Adam McKay (UT)
- Dr. Stefano Meschiari (UT)
- Dr. Eva Noyola (UT)
- Max Parks (UT)
- Dr. Judit Ries (UT)
- Dr. Aaron Rizzuto (UT)
- Dr. Sarah Salvander (UT)
- Dr. Matthew Shetrone (UT)
- Dr. Jeffrey Silverman (UT)
- Matt Stevans (UT)
- Zach Vanderbosch (UT)
- Prof. J. Craig Wheeler (UT)
- Yao-Lun Yang (UT)
- Emma Yu (UT)

...YOUR NAME HERE?

# ANALYTICS

Exponential growth  
predicted



# Q & A FLOW

The screenshot shows a web browser window with the URL [askanastronomer.org](http://askanastronomer.org). The page title is "McDonald Observatory's Ask an Astronomer". On the left, there's a sidebar with a "ASK A QUESTION" button and a list of categories: All questions, Black Holes & Cosmology, Galaxies, Stars, Planets & Solar System, Other, and Frequently asked questions. The main content area is titled "Google Form" and contains a "Question for Ask an Astronomer" section with three required fields: "Your name:", "Your email:", and "Your question:".



Me

email



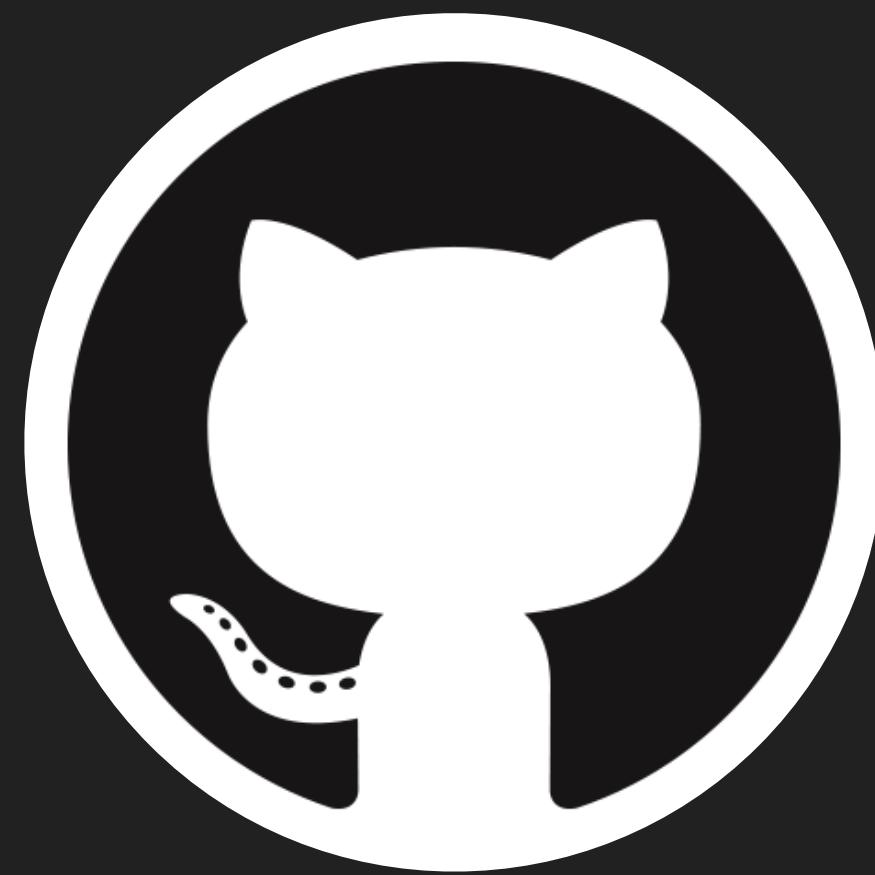
Volunteer  
(chosen based on  
topic/how long  
since last answer)

email



Me

git push



GitHub  
Pages

# THE WEBSITE

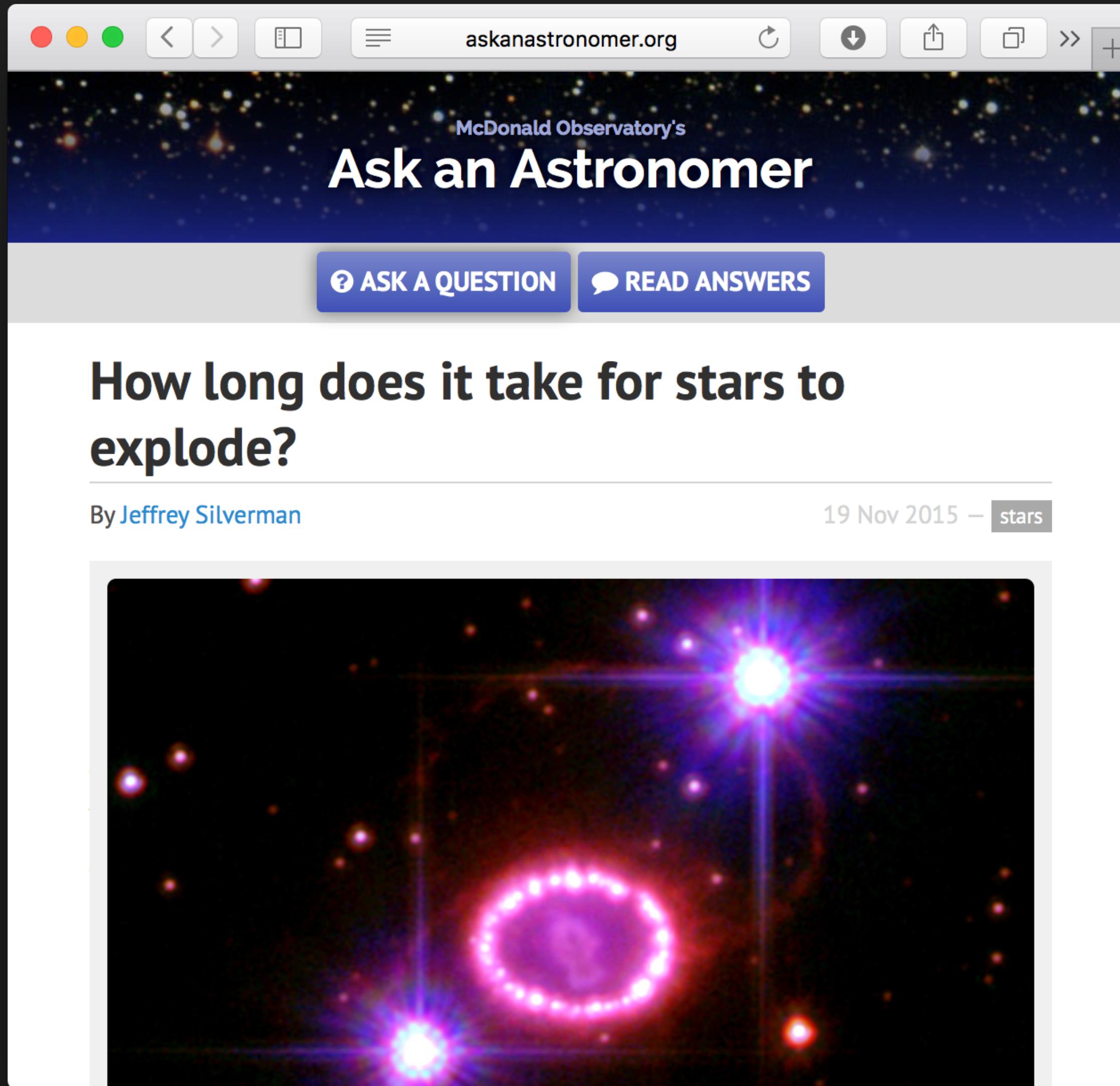
```
2015-12-01-using-radio-to-find-exoplanets.md (/Users/stefano/Projects/askanastronomer.github.io/_posts/2015-12-01-using-radio-to-find...
1 ---  
2 layout: post  
3 title: Can we find exoplanets (and possibly extraterrestrial life) by beaming  
4 low-frequency waves towards them?  
5 author: Yao-Lun Yang  
6 categories:  
7 - planets  
8 - bhc  
9 thumbnail: http://askanastronomer.org/img/alma_thumb.jpg  
10 ---  
11  
12 **If X-ray and radio beams can emit from black holes and the like in interstellar  
13 space, can lower frequency waves on the middle to low end of the spectrum be emitted  
from high-powered beams on Earth and then detected by telescopes -- like a sub  
pinging to its target -- in order to search for exoplanets and life outside Earth?**  
14  
15 This is a great question, which I believe a lot of people have thought about. To  
16 answer this question, I would like to first discuss the origin of the X-ray and  
17 radio emissions and the signatures of exoplanets and extraterrestrial life (life  
18 forms residing outside of our Solar System). Then we can think about how to detect  
19  
10: 0 Ux-[askanastronomer.github.io].../2015-12-01-using-radio-to-find-exoplanets.md Top -master  
Mark activated
```

- Static website powered by Jekyll.
- Each answer is a Markdown document.
- Website is entirely hosted on GitHub Pages, for free.

<https://github.com/askanastronomer/askanastronomer.github.io>

# WRITING OPPORTUNITIES

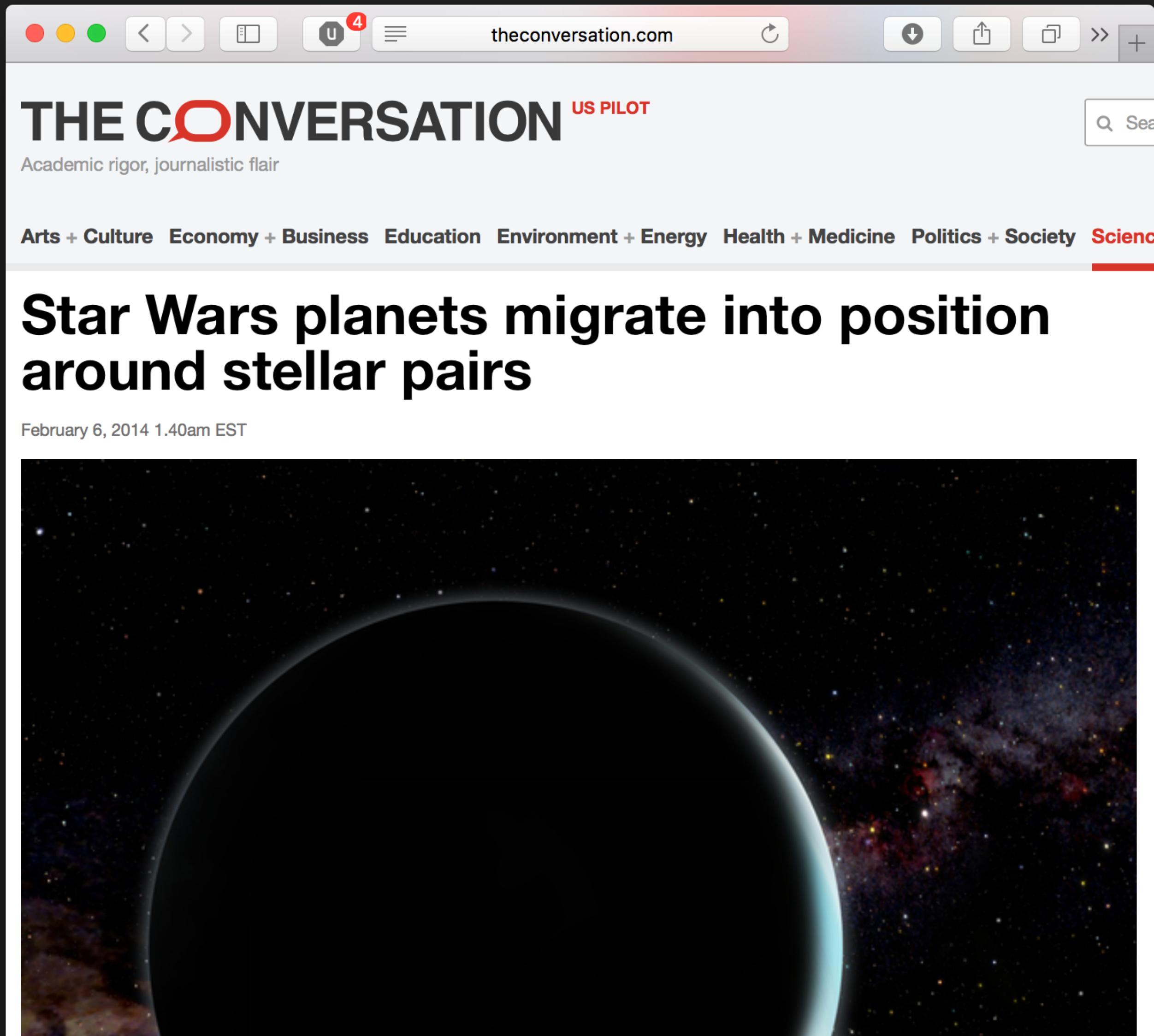
# WRITING OPPORTUNITIES



## 1. JOIN ASK AN ASTRONOMER!

- You get the opportunity to write for the general public in a super low-pressure environment.
- Small commitment of 1/2 questions/month.
- The more people contribute, the smaller the load for everyone!
- I'm committed to growing its exposure.
- Looks good on your CV!

# WRITING OPPORTUNITIES



## 2. THE CONVERSATION

- A website publishing free-to-republish articles by academics about research. Funded by Gates Foundation. Awesome editors.
- If you see a new paper in your field that you'd like to explain for the public, pitch them an article! (I've done it twice.)
- Frequently republished on SciAm, Ars Technica, & various newspapers.

# WRITING OPPORTUNITIES



## Grad School Application Help

by *Danny Barringer* on December 2, 2015

Dear undergraduate aspiring astronomer, are you tired of bashing your head against a table trying to figure out which schools to apply to, or what to say in your personal statements?

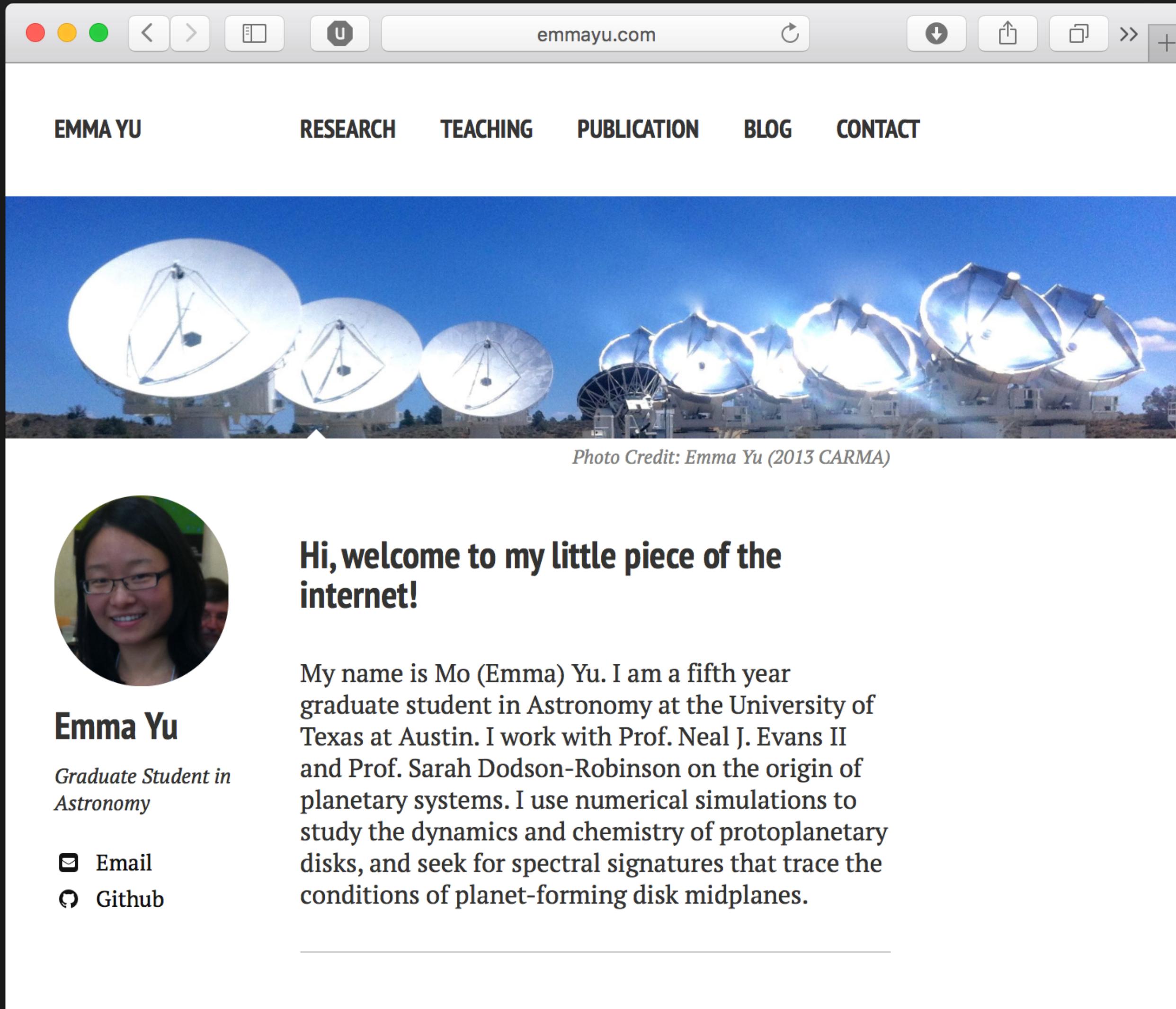
Advisors of said undergraduates, are you tired of your students bashing their respective heads against your respective desks?

Well, to both groups, we say never fear! As always, we at AstroBetter have your back with the resources contained within the [AstroBetter Wiki](#). Here you can find advice on what to do when scouting out programs and ultimately making your decision (yes, this won't happen for a little while yet, but keep it in mind!). Don't forget to take FULL advantage of the Winter AAS Meeting to meet professors and graduate students who are already at schools you might be interested in. I want to emphasize this point. MEET THE GRADUATE STUDENTS! They are almost always super-helpful and willing to chat with undergraduates about their programs. This is especially relevant at Undergraduate Orientation session, which will be held on Monday,

## 3. ASTROBETTER

- If you have a cool hack/tip&trick/technique/domain knowledge that other astronomers might find useful.
- They're pretty constantly looking for contributors!

# WRITING OPPORTUNITIES

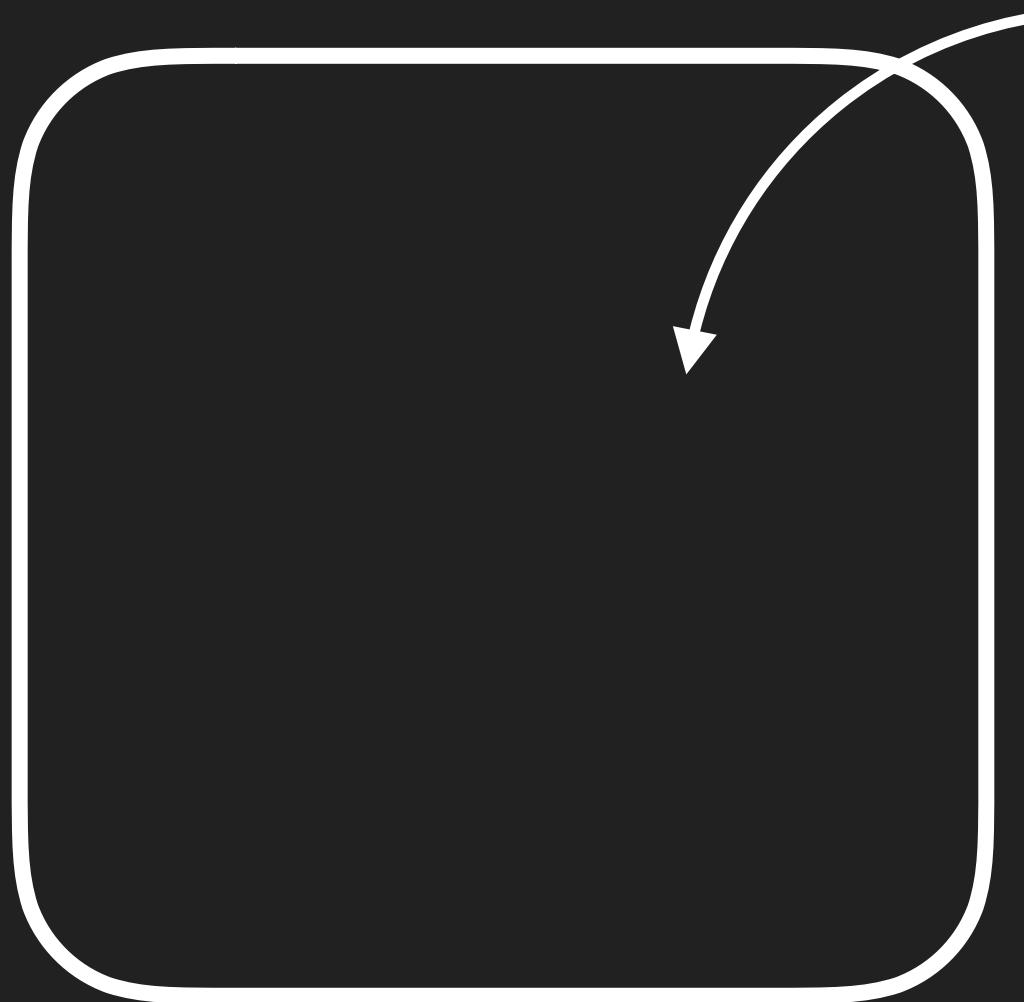


The screenshot shows a website with a dark header bar containing browser icons and the URL "emmayu.com". Below the header is a navigation menu with links to "EMMA YU", "RESEARCH", "TEACHING", "PUBLICATION", "BLOG", and "CONTACT". The main content area features a large image of several large satellite dishes under a blue sky. Below the image is a caption: "Photo Credit: Emma Yu (2013 CARMA)". To the left of the image is a circular profile picture of Emma Yu. To the right of the image is a block of text: "Hi, welcome to my little piece of the internet!". Below this is a paragraph about her research interests and work with Prof. Neal J. Evans II and Prof. Sarah Dodson-Robinson. At the bottom left are social media links for "Email" and "Github". The footer contains the copyright notice: "© 2015 Emma Yu. Powered by Jekyll using the Minimal" theme.

## 4. YOUR OWN WEBSITE

- You can host your website on GitHub Pages or Dropbox for free. Domains can be as low as \$1-\$2/year.
- You get exposure to HTML (and potentially JavaScript, and more!), which is v. useful to build an industry portfolio. Just in case!

LOGO T.B.D.

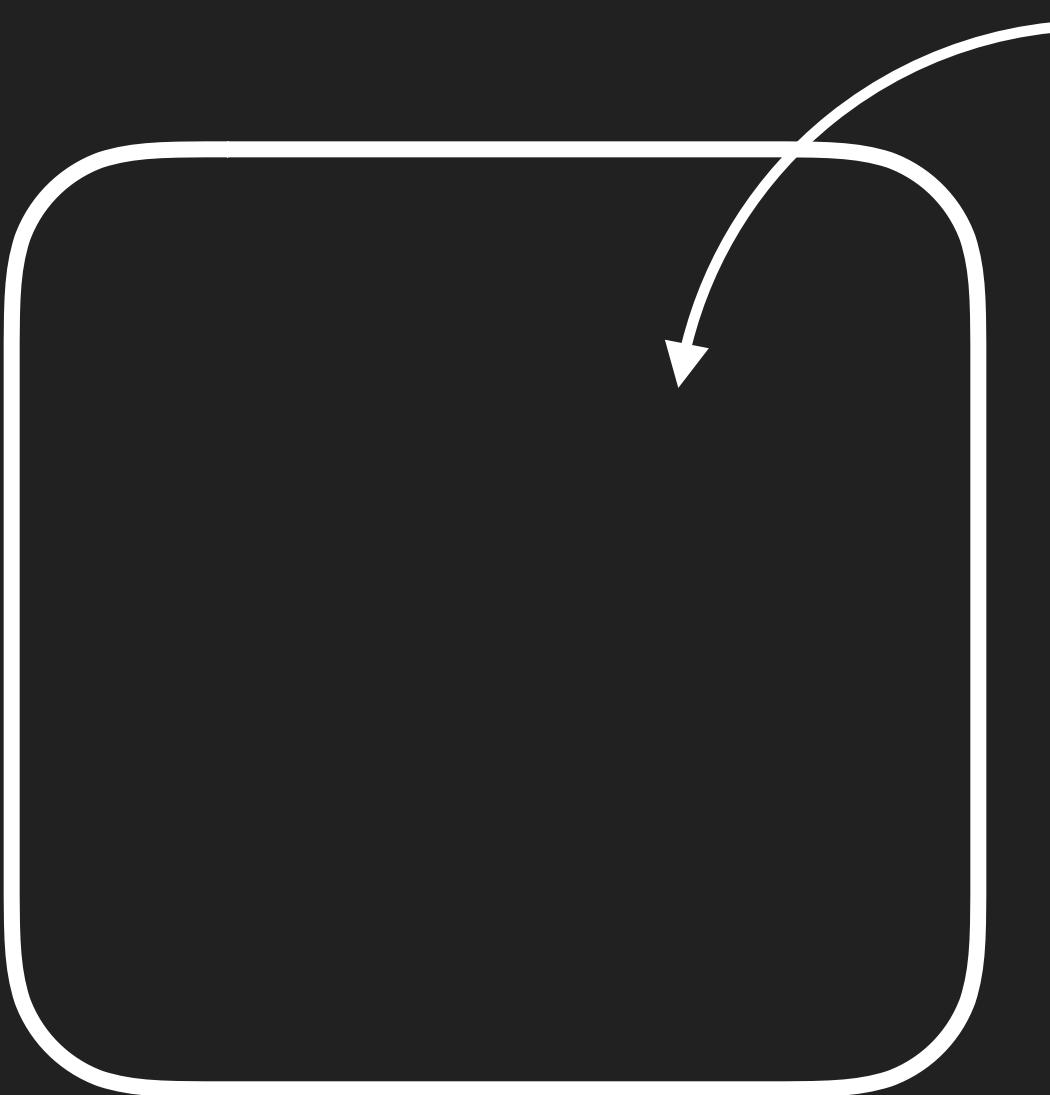


GIVE ME  
.....  
**SPACE**

AN ASK AN ASTRONOMER  
PODCAST

*hosted by Dr. Natalie Gosnell  
& Dr. Stefano Meschiari*

LOGO T.B.D.



# GIVE ME ... SPACE

AN ASK AN ASTRONOMER  
PODCAST

*hosted by Dr. Natalie Gosnell  
& Dr. Stefano Meschiari*

~30 MIN EPISODES + AFTER-SHOW

- We will interview young researchers from Department (outside UT at a later time).
- We will open with a question from the public submitted to Ask an Astronomer.
- Then, we will segue into talking about the guest's research and what it means to be an astronomer.
- During the after-show, we can talk about whatever: knitting, Kirk/Spock, The Great British Bake-Off, the choices are endless.
- Sign-up sheets coming soon!



- FYI, all the audio equipment (semi-pro microphones, mixer, spit screens, shock absorbing mounts) had already been purchased by the Department.
- That means that if you have any projects involving audio recording, you're free to borrow them too...

# THANK YOU!