



# national science week 2019

## Payton Rodman

*Black Hole Scientist*

**Astrophysicist**

**College of Sciences and Engineering,  
University of Tasmania**



What's inside a black hole? Where did the first black hole come from? And most importantly: how do they eat their lunch?

It's questions like these that make me love astronomy. Since 2015, I've been studying the most amazingly weird objects in our Universe: supermassive black holes, or SMBHs. Unlike "normal" black holes that are a tiny 10 times as massive as our Sun, SMBHs can be millions or billions of times as massive. We think there's one living at the centre of nearly every galaxy, including our own Milky Way. But don't despair: black holes aren't just cosmic vacuum cleaners, they also help galaxies to form new stars and keep things working like clockwork. Plus they can be pretty picky eaters at times!

So how did I get here? I grew up on the North-West coast of Tassie, attending primary school in Ulverstone and high school in Devonport. I've always loved a challenge (my parents would call me stubborn!), and at the end of Year 12, I couldn't think of any challenge bigger than studying physics. I moved to Hobart in 2015 for university, and by the end of that year, I was diving head-first into the next big challenge: black hole research.



There's only one thing I find cooler than studying space, and that's sharing it with others. Whether it's a public talk, a school visit, or an open day at the observatory, getting to talk about what I do and how everyone can get involved is always awesome. I also work with the citizen science project Radio Galaxy Zoo, where our citizen scientists help us to study the cosmos and even make new discoveries!

There's a bit of astronomer in all of us, we only have to look up to the sky and ask questions.

Find me on Twitter at [@astrotemp](https://twitter.com/astrotemp)

For more information:

[www.radio.galaxyzoo.org](http://www.radio.galaxyzoo.org)

[www.paytonelyce.com](http://www.paytonelyce.com)

[www.utas.edu.au/maths-physics](http://www.utas.edu.au/maths-physics)