

Vanessa Emeka-Okafor Astrophysicist



Hi there! I am Vanessa Emeka-Okafor – an astrophysicist



Where do I work?

I used to work at the European Southern Observatory in Germany as a science journalist but now I work as a research student at the University of Warwick.

What did I like doing when I was at school?

I loved science and geography but I also loved history and music, so I liked both arts and science subjects.

What do I like doing in my spare time?

I love music so I like playing my guitar and learning new songs. I also love watching sci-fi movies and reading.

What do I do as an astrophysicist?



I use extremely large telescopes to study planets around other stars (these are called exoplanets). I analyse their size, composition and temperature. Some are 100 times hotter than Earth, some rain iron, and some are made up completely of gas! They're all different and exciting.

How does what I do make the world a better place? Studying other planetary systems helps us to better understand our own solar system. Thousands of exoplanets have been discovered but none to date have been as habitable and safe as Earth. Therefore, it is important that we look after our planet as it is our only home.

What I like about my job

Every day is exciting! I get to work with a lot of scientists from around the world and meet new people. There is also the opportunity to travel to telescope sites which are all over the world from Chile to Hawaii. These big telescopes allow us to study planets that are light years away from us in great detail – this is really cool!

Challenges I have faced



I didn't have the easiest time at school and there were lots of obstacles. However, I knew that I had a passion for physics so I worked hard to prove people wrong. I think passion can drive you to do a lot of things you never thought were possible.

If you want to be an astrophysicist, you need:

- **to be interested** in things like planets, stars, galaxies, black holes, comets etc
- * to have great analytical thinking skills so you can think things through and ask yourself important why/what/when/how questions
- to be passionate about physics and to love solving problems and learning about topics like gravity and light.
- **to be curious** and want to **ask** questions





Discussion time

 Would you like to be an astrophysicist like Vanessa Emeka-Okafor?
Why? Why not?



- What skills and interests do you already have that would help you become an astrophysicist?
- What new skills and knowledge would you need to develop?

Free supporting resources for astrophysics

<u>**City Science Stars**</u> - practical science activities (for 9–11-year-old children), using links to football, other sports and space

Science At Work – see 'Gene Cernan' and 'Meet two space scientists'

Science Fun at Home – see 'World Space Week'

<u>I bet you didn't know...</u> articles use cutting-edge science research as a context for learning. Teacher Guides can be used as classroom presentations:

- How to play planetary hide and seek
- One of Saturn's moons could be a home for extra-terrestrial life
- Insight into Mars
- Ice giants at the end of the Solar System
- There is a storm coming and it is not going away
- There is lightning at the end of the Solar System

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