IAU13XX – IAU Release

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UK young people have opportunity to name their own Exoplanet

**UCLan astrophysicist to lead UK campaign of International Astronomical Union competition**

Within the framework of its 100th anniversary commemorations, the International Astronomical Union (IAU) has announced today that it is is organising **the IAU100 NameExoWorlds (**[**www.nameexoworlds.iau.org**](http://www.nameexoworlds.iau.org)**) global competition** that allows any country in the world to give a popular name to a selected exoplanet and its host star. Over 70 countries including the United Kingdom, have already signed up to organise national campaigns that will provide the public with an opportunity to vote. The aim of this initiative is to create awareness of our place in the Universe and to reflect on how the Earth would potentially be perceived by a civilisation on another planet.

The planets in our own solar system orbit around our closest star, the Sun. Planets that orbit around other stars are called **exoplanets**. They are very difficult to see directly with telescopes as an exoplanet is hidden by the brightness of the **host star**.

The **UK ExoWorld Naming Competition (**[**www.exoworld.uk**](http://www.exoworld.uk)**)** will launch in Autumn 2019. From September to October 2019, schools and youth organisations will propose names for the UK's specific exoplanet and host star. These suggestions will be reduced to a small number of finalist names by an expert panel. In November 2019, a public vote on these finalists will choose the new popular names, with the winner announced in December 2019.

In recent years, astronomers have discovered thousands of planets and planetary systems orbiting around nearby stars. Some are small and rocky like the Earth, whilst others are gas giants like Jupiter. It is now believed that most stars in the Universe could have planets orbiting them and that some of them may have physical characteristics that resemble those of the Earth. The sheer number of stars in the Universe, each potentially with orbiting planets, along with the ubiquity ofthe molecules and compounds that could lead to the evolution of organisms, suggests that extra-terrestrial life may be likely.

Professor Robert Walsh, UK National Outreach Coordinator for the International Astronomical Union and chair of the UK ExoWorld Naming Committee said, “*This is a unique opportunity for UK young people to give a name to a planet and star! Imagine a planet out there that you have named and will be called that name for all time. This competition helps us understand our place in the Universe as we explore together other worlds outside of our own.”*

The star and exoplanet given to the UK to name are **WASP-13** and **WASP-13b** respectfully. Their current scientific designation arises from the fact they were first examined by the **W**ide **A**ngle **S**earch for **P**lanets international consortium.

This exoplanet was discovered and reported upon in 2009 by an international team led by British astronomers.

**WASP-13** is a star in the Lynx constellation and is very similar to our Sun, although it is hotter and most likely older. It is 505 light years from Earth.

**WASP-13b** is an exoplanet in the orbit of WASP-13. The planet is about a third of the mass of Jupiter, but with a radius 22% bigger than Jupiter's. WASP-13 orbits very close to its host star at only 5% of the distance between the Sun and Earth. It completes one full orbit in only four days.

More detailed information about the star and the nature of exoplanet can be found at NASA’s Exoplanet Catalog

([exoplanets.nasa.gov/exoplanet-catalog/5368/wasp-13-b/](https://exoplanets.nasa.gov/exoplanet-catalog/5368/wasp-13-b/) ).

The IAU is the authority responsible for assigning official designations and names to celestial bodies and now, while celebrating its first 100 years of fostering international collaboration ([IAU100](https://www.iau-100.org/)), it wishes to contribute to the fraternity of all people with a significant token of global identity. Within the framework of the IAU100 NameExoWorlds project, the IAU offers every country the chance to name one planetary system, comprising an exoplanet and its host star. Each nation's designated star is visible from that country, and sufficiently bright to be observed through small telescopes. This is only the second time in history that a competition will lead to the naming of stars and exoplanets.

“*This exciting event invites everyone worldwide to**think about their collective place in the Universe, while stimulating creativity and global citizenship,*” shared Debra Elmegreen, IAU President Elect. “*The NameExoworlds initiative reminds us that we are all together under one sky.*”

END OF RELEASE

**Additional information:**

**Main websites**

IAU 100 NameExoWorlds website: [www.nameexoworlds.iau.org](http://www.nameexoworlds.iau.org/)

UK National Exoworld competition website: [www.exoworld.uk](http://www.exoworld.uk)

IAU100 website: [www.iau-100.org](http://www.iau-100.org/)

**UK Exoplanet and Host Star**

The UK specific exoplanet and host star is **WASP-13b and WASP-13** respectfully, their current scientific designation arising from the fact they were investigated by the Wide Angle Search for Planets international consortium.

WASP-13

WASP-13 is a star in the Lynx constellation. The star is similar, in terms of metallicity and mass, to our Sun, although it is hotter and most likely older. The star was first observed in 1997 and is 505 light years from Earth.

WASP-13b

WASP-13b is an extrasolar planet that was discovered in 2009 in the orbit of the sun-like star WASP-13. The planet has a mass of about a third that of Jupiter, but a radius 22% larger than that gas giant planet. The exoplanet orbits very close to its host star at approximately only 5% of the distance between the Sun and Earth. It does one full orbit around the star in only four days.

See more information can be found at NASA’s Exoplanet Catalog: [exoplanets.nasa.gov/exoplanet-catalog/5368/wasp-13-b/](http://exoplanets.nasa.gov/exoplanet-catalog/5368/wasp-13-b/)

Also see, WASP-13 Wikipedia link: [en.wikipedia.org/wiki/WASP-13](https://en.wikipedia.org/wiki/WASP-13)

WASP-13b Wikipedia link: [en.wikipedia.org/wiki/WASP-13b](https://en.wikipedia.org/wiki/WASP-13b)

**IAU100 global competition processes**

After carefully selecting a large sample of well-studied, confirmed exoplanets and their host stars, the IAU100 NameExoWorlds Steering Committee assigned a star–planet system to each country, taking account of the association with the country and the visibility of the host star from the country. Each nation's designated star is visible from that country, and sufficiently bright to be observed through small telescopes.

In each participating country, a national committee has been specially created by the National Outreach Coordinators ([IAU NOCs](https://www.iau.org/public/noc/)) to carry out the competition at the national level. The national committee, following the methodology and guidelines set up by the IAU100 Name ExoWorlds Steering Committee, is the body responsible for providing the conditions for public participation, disseminating the project in the country and establishing a voting system.

The National Competitions will be carried out from June to November 2019 and, after final validation by the IAU100 NameExoWorlds Steering Committee, the global results will be announced in December 2019. The winning names will be used freely in parallel with the existing scientific nomenclature, with due credit to the persons that proposed them.

**IAU100 process for choosing Exoplanets**

The NameExoWorlds campaign has selected planetary systems for naming composed of planets orbiting stars that could be observed with a small telescope from the latitude of the capital of each country. The system often has a link with the assigned country, such as the facilities used to discover the planet, or the scientists involved in the discovery of the planet. ​The existence of the planet is generally more secure for systems which were discovered earlier, as they have had more years of research to survive further scrutiny. For this reason, the sample is focused on exoplanets revealed during the first two decades of exoplanet exploration, with most discovery dates before 2012. The visual brightness range between 6th and 12th magnitude. The planets were all discovered via either the Doppler spectroscopy (radial velocity) method or transit method, and all were discovered using ground-based telescopes. The planets are all likely to be gas giants similar to Jupiter and Saturn, with estimated masses between 10% and 500% that of Jupiter. All these systems are composed of single stars with only one known planet orbiting around them. It is possible that the stars have additional planetary and stellar companions which may be discovered in the future. This is so that each country has an equal opportunity of naming similar celestial bodies.

**More Information on the IAU**

The IAU is the international astronomical organisation that brings together more than 13 500 professional astronomers from more than 100 countries worldwide. Its mission is to promote and safeguard astronomy in all its aspects, including research, communication, education and development, through international cooperation. The IAU also serves as the internationally recognised authority for assigning designations to celestial bodies and the surface features on them. Founded in 1919, the IAU is the world's largest professional body for astronomers.

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**Possible images**

Title: NASA\_EXOPLANET\_ARTISTCONCEPT

Explanation: Example of an artist’s impression of a Jupiter-like exoplanet around a star like our sun (not WASP-13b).

Credit: NASA/Goddard/S. Wiessinger

Weblink: <https://images-assets.nasa.gov/image/GSFC_20171208_Archive_e001417/GSFC_20171208_Archive_e001417~orig.jpg>

Title: ROYALTY\_FREE\_EXOPLANET\_ARTIST

Explanation: Artist concept of an exoplanet (not WASP-13b).

Credit: Royalty free image by [skeeze](https://pixabay.com/users/skeeze-272447/?utm_source=link-attribution&utm_medium=referral&utm_campaign=image&utm_content=708598) from [Pixabay](https://pixabay.com/?utm_source=link-attribution&utm_medium=referral&utm_campaign=image&utm_content=708598)

Weblink : <https://pixabay.com/photos/planet-gas-artist-impression-708598/>