

Planet hunters announce three new finds

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Artists impression of an extra-solar planet (Copyright STFC)

The UK's leading team of planet-hunting astronomers, the Wide Angle Search for Planets (WASP), today announced the discovery of three new planets. These extra-solar planets were seen to pass in front of, or transit, their host star. Studying such planets outside of our Solar System allows scientists to investigate how planetary systems form. WASP is the first team to detect planets in both the Northern and Southern Hemisphere using this technique.

Dr Coel Hellier, of Keele University, comments "When we see a transit we can deduce the size and mass of the planet and also what it is made of, so we can use these planets to study how solar systems form".



WASP-4 and WASP-5 are the first planets discovered by the WASP project's cameras in South Africa, and were confirmed by a collaboration with Swiss and French astronomers. "These two are now the brightest transiting planets in the Southern hemisphere" said Dr Hellier.

WASP-3 is the third planet that the team has found in the North, using the SuperWASP camera sited in the Canary Islands. Dr Don Pollacco, of Queen's University Belfast, said "We are the only team to have found transiting planets in both the Northern and Southern hemispheres; for the first time we have both SuperWASP cameras running, giving complete coverage of the whole sky".

Exoplanet expert Professor Andrew Cameron, of St. Andrews University, comments "All three planets are similar to Jupiter, but are orbiting their stars so closely that their 'year' lasts less than two days. These are among the shortest orbital periods yet discovered". Being so close to their star the surface temperatures of the planets will be more than 2000 degrees Celsius, so it is unlikely that life as we know it could survive there. But the finding of Jupiter-mass planets around other stars supports the idea that there are also many Earth-sized planets waiting to be discovered as astronomers' technology improves.

The WASP project is the most ambitious project in the world designed to discover large planets. Funding for the project comes from the UK Universities and the Science and Technology Facility Council.

The discovery of WASP-3, WASP-4 and WASP-5 is being announced by the WASP project this week at an international conference on extrasolar planets in Suzhou (near Shanghai), China.

Source: WASP



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