

## Three new 'super-Earths' discovered

An artist's illustration of an exoplanet. | Photo Credit: [NASA](#)

The Kepler Space Telescope has identified three super-earths orbiting a 'cool dwarf star' about 267 light years from the Earth.

Super-earths have a mass higher than the Earth, but are lighter than gas filled planets like Neptune and Uranus. They are good candidates for having terrestrial surfaces and oceans that may support life. There are about 55 confirmed super-earths till date.

The new exo-planets orbit the star LP415-15 and are named LP415-17 b, LP415-17 c and LP415-17 d. They weigh about four, six and five times (respectively) more than the Earth.

The super-earths b, c and d have a radius of about 1.8, 2.6 and 1.9 times the Earth radii and take about six, 13 and 40 days respectively to orbit their host star.

On January 22, a pre-print version of the finding was published on arXiv website.

The discovery was made during Kepler's 'Campaign 13' from March to May 2017, which focussed on the Hyades star cluster and the Taurus constellation. The scientists studied the photometric data from Kepler and the spectra acquired with high-precision spectrograph to characterise the star and the exo-planets.

"Additional photometric monitoring is required, [and this star and planet system makes]..a good target to incoming facilities such as James Webb Telescope," the authors wrote.

The telescope is another space telescope being built by NASA along with the European Space Agency and the Canadian Space Agency. Scheduled to be launched in 2019, it is named after James Webb, NASA's former administrator.

According to NASA, this next generation telescope "will study every phase in the history of our Universe, ranging from the first luminous glows after the Big Bang, to the formation of solar systems capable of supporting life on planets like Earth, to the evolution of our own Solar System."

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Just what exactly needed such special protection and secrecy is still unknown.

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