

NASA'S PROBE DISCOVERS A NEW PLANET

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NASA's latest planet-hunting probe has discovered a new world outside our solar system, orbiting a dwarf star 53 light years away.

This is the third new planet confirmed by the Transiting Exoplanet Survey Satellite (TESS) since its launch in April last year.

The planet, named HD 21749b, orbits a bright, nearby dwarf star about 53 light years away, in the constellation Reticulum, and appears to have the longest orbital period of the three planets so far identified by TESS.

HD 21749b journeys around its star in a relatively leisurely 36 days, compared to the two other planets — Pi Mensae b, a “super-Earth” with a 6.3-day orbit, and LHS 3844b, a rocky world that speeds around its star in just 11 hours.

All three planets were discovered in the first three months of TESS observations. “It’s the coolest small planet that we know of around a star this bright,” said Diana Dragomir, a researcher in the Massachusetts Institute of Technology (MIT), who led the discovery.

“We know a lot about atmospheres of hot planets, but because it’s very hard to find small planets that orbit farther from their stars, and are therefore cooler, we haven’t been able to learn much about these smaller, cooler planets. But here we were lucky, and caught this one, and can now study it in more detail,” Ms. Dragomir said.

The planet is about three times the size of the earth, which puts it in the category of a “sub-Neptune.”

However, it is unlikely that the planet is rocky and therefore habitable; it’s more likely made of gas, of a kind that is much more dense than the atmospheres of either Neptune or Uranus.

“We think this planet wouldn’t be as gaseous as Neptune or Uranus, which are mostly hydrogen and really puffy. The planet likely has a density of water, or a thick atmosphere,” Ms. Dragomir said.

China’s Chang’e-4 lunar rover scripted history on January 3 when it made the first-ever soft landing on the far side of the moon and sent back

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