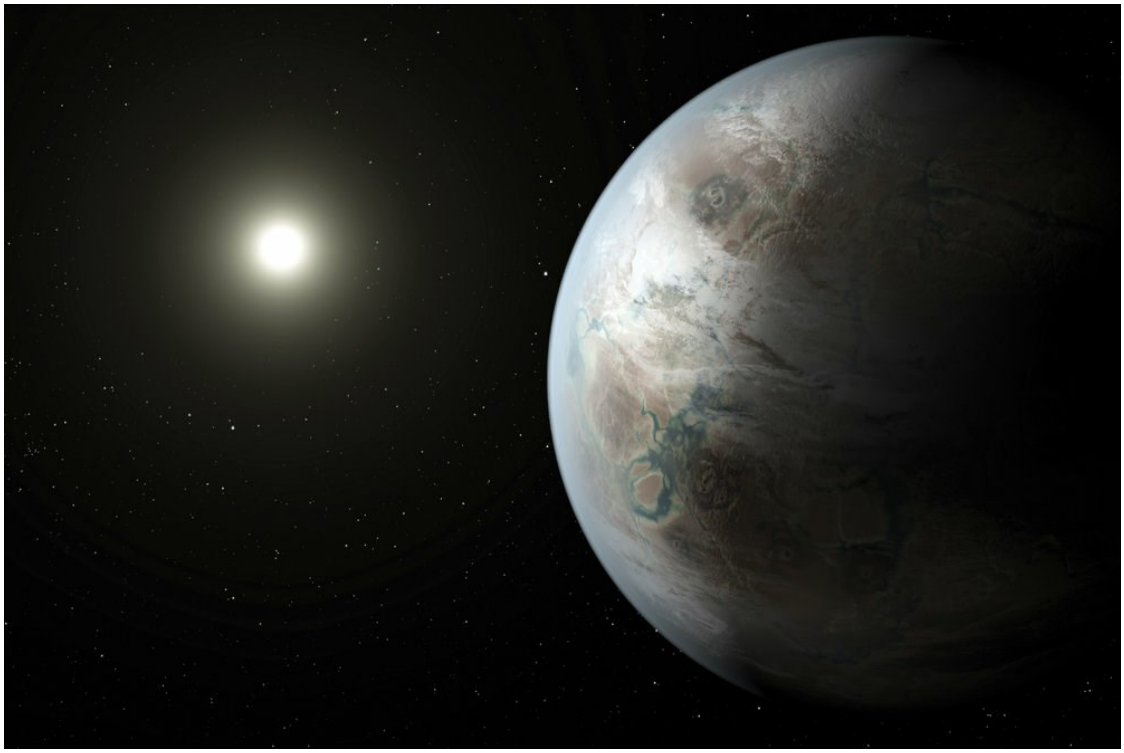
Earth's Cousin Found

DISCOVERY ZONE, ASTRONOMY, RESEARCH



An artist's concept of the newly discovered planet. Image courtesy of NASA Ames/JPL-Caltech/T. Pyle

It's a good deal bigger and 1,400 light years away, but the newly discovered planet Kepler-452b is close enough to Earth in other ways that astronomers are calling it Earth's long lost relative. Found by a team including UT Austin astronomers Bill Cochran and Michael Endl, Kepler-452b is the first planet orbiting a star like our Sun and within the "goldilocks" zone, meaning it's not too hot and not too cold for liquid water to pool on the surface, potentially forming life.

A planet had been discovered earlier in a similarly habitable zone around a red dwarf, but Kepler-452b is the first Earth-like planet to be found revolving around a star that resembles the Sun. A dozen smaller candidates for habitable-zone planets, many around Sun-like stars, were also found by the research team, making the discoveries announced this summer a milestone in the journey to understand our place in the cosmos.

Kepler-452b is the first Earth-like planet to be found revolving around a star that resembles the Sun.

"Kepler has recently shown that virtually all of the stars that we see in the sky probably host planetary systems," Cochran says. "Now we are discovering that a significant number of those systems are very much like our own and may have the capability of being habitable."

Kepler-452b, in the constellation Cygnus, is bigger and older than Earth: it's 60 percent wider than our planet and about 6 billion years old. The planet takes 385 days to orbit around its own star, which itself is 1.5billion years older than our Sun.

Visit the McDonald Observatory online for more on the search for new planets: mcdonaldobservatory.org