Earth–like Planet Discovered

I’m sure many of you have heard about the Earth–like planet that was discovered last week by the Kepler program. This is a huge discovery and one of the first major finds for the Kepler telescope, which NASA heavily invested in. The Kepler telescope examines the subtle changes in brightness that indicate an orbiting planet is crossing in front of a star; from this data scientists can determine the relative size and makeup of the planet.

The Earth–like planet that was discovered is the relative size of Earth, with rocky characteristics, and in the Goldilocks zone which is the location from the star where it is not too hot nor too cold for life. The planet, named Kepler–186f, circles a dwarf red star 500 light years from Earth. The newfound planet is roughly 10% larger than Earth and is likely to have liquid water on the surface. Since it is in the Goldilocks zone, the water will neither boil away or freeze over. The planet orbits a star (sun) that is smaller and dimmer than our sun. For this reason, scientists believe the planet is cooler than Earth and average temperature is most likely around freezing. It also orbits the sun every 130 days. Scientists also believe that the atmosphere of the planet, if there is one, has a high percentage of carbon dioxide. The most important aspect of supporting life similar to humans is the presence of liquid water. I anticipate the planet will be studied more to see if liquid water truly does exist on the planet.

The Kepler program was launched in 2009 and has found 961 planets, with only a few dozen in the habitable zone. Most of them are gaseous, like Jupiter and Saturn, and would not support life. With the newfound planet so far away, scientists may never
discover if sustainable life can be supported there. The importance of the discovery is
that Earth–like planets do indeed exist within our universe. With technology constantly
improving, who knows what else scientists will be able to discover in the future. Kepler–186f is considered a “cousin” of Earth rather than a “twin”, but it’s still very
intriguing to know that there is a planet that could possibly sustain organic life like our
Earth. Who knows what is really out there…

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