
Astronomers Detect Closest Earth-Like Planet to Date

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An article in the journal *Nature* describes GJ1132b as the most important exoplanet discovered so far because its relative proximity will allow astronomers to study it in greater detail than any other object of its kind.

Though the planet is too hot to be habitable for humans – it receives 19 times more radiation from the star it orbits than the Earth does from the Sun – it is temperate enough to maintain a substantial atmosphere.

GJ1132b has a density comparable to that of Earth, which leads scientists to believe it is made mostly of rock and iron.

Images obtained by the Cerro Tololo Inter-American Observatory in Chile helped a team led by MIT's Zachory Berta-Thompson to calculate that the planet orbits every 1.6 days around star Gliese 1132, a red dwarf only 21 percent the size of the Sun.

Recent studies show that red dwarves often have planetary systems with numerous bodies ranging in size from 0.5 to 1.5 times the Earth's.

The fact that GJ1132b transits in front of its star at a plane nearly parallel with the point of view of an observer on Earth facilitates the work of studying its atmosphere and of searching for a biological signature revealing the presence of life.