TWIN EARTH DISCOVERED

Distant Planet May Harbor Life

January 31, 2011, St. Louis, MO

Scientists from the Anheuser-Busch Institute of Astronomy announced yesterday the discovery of a planet very similar to Earth. "It's a rocky planet whose temperature and atmosphere are just like Earth", said Dr. Cameron Budweiser, leader of the research team.

The planet, dubbed "New Earth" was discovered around the star 53 Cas, a "red dwarf" star with only one tenth the mass of the Sun, and only a tiny fraction of the Sun's luminosity. "53 Cas is so faint that a planet would have to be thirty times closer to it than the Earth is to the Sun to get the same amount of light and heat" said Lindsay Coors, a researcher on the team. "And that's just where we found New Earth."

The scientists made their discovery by identifying tiny shifts in the velocity of 53 Cas, caused by the reflex motion of the star due to the orbit of New Earth. "It's just Newton's Laws in action" said Dr. Budweiser. "The low mass of the star and the small orbit of the planet make it that much easier to see".

Another group of scientists at the Universiteit Heineken in The Netherlands followed up the discovery by identifying transit events, in which the planet obscures a small amount of light from the star. "The transits prove conclusively that this really is a planet" said Dr. Alex van Grolsch, a member of the Dutch group, in an interview with the journal *Nature*. "We can also show that the density of the planet is similar to rocky planets like the Earth, much higher than gaseous planets like Jupiter."

The Dutch group was also able to identify oxygen and water vapor in the atmosphere of New Earth, which Dr. Grolsch said may indicate biological activity. The composition of the atmosphere was determined by

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