## New planet challenges evolutionary models

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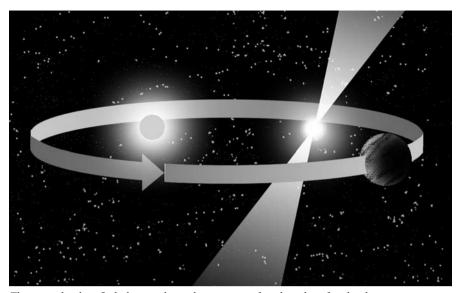
Recently, and as has been widely reported worldwide, astronomers announced the discovery of an extrasolar planet<sup>1</sup> in the distant M4 star cluster.<sup>2</sup> Like essentially all the extrasolar planets that have been discovered to date, the detection of this planet goes against evolutionary predictions, but is consistent with the Bible.

This planet is unique (so far) for two reasons. It is the first planet to be discovered in a globular cluster.<sup>3</sup> Second, it is the only planet currently known to orbit a binary star system. That is, the planet orbits two stars (which orbit each other) rather than one. Moreover, these are not 'ordinary' stars; one is a white dwarf,<sup>4</sup> the other is a pulsar.<sup>5</sup> This strange planetary system came as quite a surprise to secular astronomers.

Secular astronomers assume that our solar system is not a special creation, but is the result of the collapse of a nebula. They had expected that planetary systems around other stars would resemble our solar system (since they are formed in the same way, according to evolutionary thinking). But the stellar systems discovered so far have been very different from our own. This recent discovery is perhaps the strangest planetary system discovered so far. However, creationists are delighted by such remarkable diversity; this is not a problem for a creative Designer.

The planet has a mass two to three times that of Jupiter<sup>7</sup> and is not directly visible. It was discovered by the slight gravitational 'tug' it exerts on the pulsar; this produces a slight change in the pulsar's radio signals which we detect on earth. This is an indirect detection method, but it is valid operational science—so creationists have no problem with this.<sup>8</sup>

Many reports claim that this is the oldest planet to be discovered—with



The recently identified planet orbits a binary pair of a white dwarf and pulsar.

an age of 12.7 Ga.<sup>9</sup> However, the planet's alleged age is not based on any evidence whatsoever; it is based only on evolutionary assumptions. Secular astronomers assume that the planet formed with the star—which their models assume to be 12.7 Ga old. (Recall that this planet cannot even be seen, let alone age-dated.)

This latest discovery presents a great challenge for those who hold to naturalistic models of origins. Most secular astronomers had thought that planets would not be found in globular clusters. 10 Globular star clusters consist of 'Population II stars'. These stars are 'metal-poor'; they have only a meager supply of elements heavier than helium (astronomers call these heavy elements 'metals' compared to stars like the sun. In the evolutionary scenario, these metals are the initial building blocks for planets. Secular astronomers had thought that planets would be unlikely to form in globular clusters because of the low metal content.

So, the latest find is forcing the evolutionary astronomers to revise their models. Whenever secular scientists are forced to alter their models in light of new evidence, it reminds us of the tentative nature of evolutionary speculations—and of the unchanging, inerrant Word of God. This fascinating stellar system challenges evolutionary thinking, and demonstrates God's creativity.

## References

- An extrasolar planet is a planet that orbits a star other than the sun.
- The M4 star cluster can be easily seen with binoculars under dark skies. It appears as a fuzzy spot just west of the star Antares in the constellation Scorpius. For North Americans, Antares is the bright, red star low in the south on summer evenings.
- Star clusters come in two varieties. 'Open clusters' contain a few hundred stars. These clusters are found within the disk of our galaxy. 'Globular clusters' contain hundreds of thousands of stars. They are spherical in shape and orbit outside the plane of the galaxy.
- 4. A white dwarf is far smaller than an 'ordinary' star. Typically, they are only about the size of earth but are extremely dense. Their mass is comparable to the sun. However, this particular white dwarf is unusually low in mass—about one third of the sun's mass.
- 5. A pulsar is an extremely dense object made of neutrons. Pulsars have a mass greater than the sun's, but are only about 10 km across. As they rotate, they emit precisely timed radio pulses that can be detected on Earth.
- Bernitt, R., Extrasolar planets suggest our solar system is unique and young, *TJ* 17(1):11–13, 2003.
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- 8. Operational science is testable, repeatable and falsifiable.
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