Houston Chronicle

Astronomer

NEW YORK (AP) — An outer space object reported as a new planet this week is too hot and massive to fit that classification, says an astronomer who also says he reported its detection last year.

But one of the astronomers who reported observing the object says it's as much a planet as Jupiter is.

Calling it a "brown dwarf," a gas ball too small to ignite a nuclear fire and become a star, seems to satisfy every-

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says object in deep space is too hot, massive to be planet

body.

Astronomers this week reported evidence of the object, about 30 to 80 times as massive as Jupiter and about 10 times as hot, which would be the first planet to be observed outside the solar system. It orbits a star about 21 light years from Earth in the Milky Way constellation Ophiuchus.

The first direct observation of such an object — as opposed to detecting its presence from its gravitational tugs on nearby stars — was announced jointly this week by the National Science Foundation, the University of Arizona and the National Optical Astronomy Observatories. The team was led by Donald W. McCarthy Jr. of the University of Arizona.

On Thursday, McCarthy said laymen may think of planets as rocky, but the solar system contains four planets that, like the new object, are gaseous: Jupiter, Saturn, Uranus and Neptune. Like Jupiter and Saturn, the object generates some of its own heat, he said.

"It's a large Jupiter. We expect it would look a lot like Jupiter," McCarthy said. "If instead of Jupiter you had this, a brown dwarf, there, it would be called a planet."

Robert Harrington, of the Naval Observatory in Washington, said he would not call the object a planet and is even tentative about Jupiter.

On the basis of mass, the new object stands somewhere between Jupiter and small stars, he said, and the crucial question is where to draw the line between planet and non-planet. He said he considers Jupiter a brown dwarf rather than a planet.

Harrington said he reported the presence of the object last year in a scientific journal.

George Field of the Harvard-Smithsonian Center for Astrophysics said Thursday the question whether the new object is a planet is too close to call.

"Because these things have not been found before, it's anybody's ball game what you call it," he said. "Such an object is in a way a star, and in a way a planet."

Field said the new object, with a calculated surface temperature of 2,00 degrees Fahrenheit, is about 10 time as hot as Jupiter but only half as hot a cool stars.