

Pluto Could Lose Planet Status

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The artist's rendition shows "Sedna" in relation to other bodies in the solar system, including Earth and its Moon; Pluto; and Quaoar, a planetoid beyond Pluto that was the largest known object beyond Pluto. Image courtesy: NASA/JPL-Caltech

At its conference this August, the International Astronomical Union (IAU) will make a decision that could see Pluto lose its status as a planet.

For the first time, the organisation will be officially defining the word "planet", and it is causing much debate in the world of astronomy.

There is only one thing that everyone seems to agree on: there are no longer nine planets in the Solar System.

The debate has been brought to a head by the discovery of a potential 10th planet, temporarily named 2003 UB313 in January 2005. This new candidate planet is bigger than Pluto.

The question now facing the IAU is whether to make this new discovery a planet.

Pluto is an unusual planet as it is made predominantly of ice and is smaller even than the Earth's Moon.

There is a group of astronomers that are arguing for an eight-planet SolarSystem, with neither Pluto or 2003 UB313 making the grade as a planet; but a number of astronomers are arguing for a more specific definition of a planet.

One of these; Kuiper Belt researcher Dr Marc Buie, of the Lowell Observatory in Arizona, has come up with a clear planetary definition he would like to see the IAU adopt.

I believe the definition of planet should be as simple as possible, so I've come up with two criteria," he said.

"One is that it can't be big enough to burn its own matter - that's what a star does. On the small end, I think the boundary between a planet and not a planet should be, is the gravity of the object stronger than the strength of the material of the object? That's a fancy way of saying is it round?"

This definition could lead to our Solar System having as many as 20 planets, including Pluto, 2003 UB313, and many objects that were previously classified as moons or asteroids.

One possible resolution to the debate is for new categories of planet to

be introduced. Mercury, Venus, the Earth and Mars would be "rocky planets". The gas-giants Jupiter, Saturn, Uranus and Neptune would be a second category.

Whatever the outcome of this debate there is only one thing that we can be certain of; by September 2006 there will no longer be just nine planets in our Solar System.

Source: BNSC

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