

# Despite new information, Pluto will remain a dwarf planet, cosmologist says

July 17 2015, by Rachel Stern

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Pluto nearly fills the frame in this image from the Long Range Reconnaissance Imager (LORRI) aboard NASA's New Horizons spacecraft, taken on July 13, 2015 when the spacecraft was 476,000 miles (768,000 kilometers) from the surface. This is the last and most detailed image sent to Earth before the spacecraft's closest approach to Pluto on July 14. The color image has been combined with lower-resolution color information from the Ralph instrument that was acquired earlier on July 13. This view is dominated by the large, bright feature informally named the "heart," which measures approximately 1,000 miles (1,600 kilometers) across. The heart borders darker equatorial terrains, and the mottled terrain to its east (right) are complex. However, even at this resolution, much of the heart's interior appears remarkably featureless—possibly a sign of ongoing geologic processes. Credit: NASA/APL/SwRI

Back in 1930, it was an easy answer – Pluto was a planet because we couldn't see anything else brighter at a similar distance away from us, says Dejan Stojkovic, an associate professor of physics in the University at Buffalo College of Arts and Sciences.

Then, in the 1990s, astronomers began detecting more and more planet-like objects around Pluto and the questions started – was Pluto a planet or not?

Before, in 1930, Pluto was discovered because it was icier than those other objects, and, therefore, easier to see because of its reflective nature, he said. But then, when other objects were discovered, questions about its size began to pop up – was it big enough to be considered a planet?

Pluto was officially demoted in 2006 to dwarf planet status, and despite the New Horizons' mission, Stojkovic believes Pluto will remain that way.

"When it comes to Pluto, New Horizons' mission has taught us that it's bigger than we thought and its size was one of the reasons it was demoted," he said. "We can label things what we want, but it's irrelevant because nature uses its own logic and as you can see, most of the time, the two don't match up."

One of Stojkovic's favorite Pluto stories is that two states – Illinois and New Mexico – passed laws declaring that it will always be considered a planet. That shows the arbitrary nature of planet-declaring, he says.

People get together and exchange opinions about whether or not to call it a dwarf planet or a planet. But when it comes down to it, for Stojkovic, he believes Pluto will remain a [dwarf planet](#) because it was already demoted once.

"They won't sound serious if they keep going back and forth," he said. "If they made Pluto a planet again, they would have to re-evaluate the definition of a planet and that would then put our moon in the planet conversation. I don't see that happening."

Provided by University at Buffalo

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