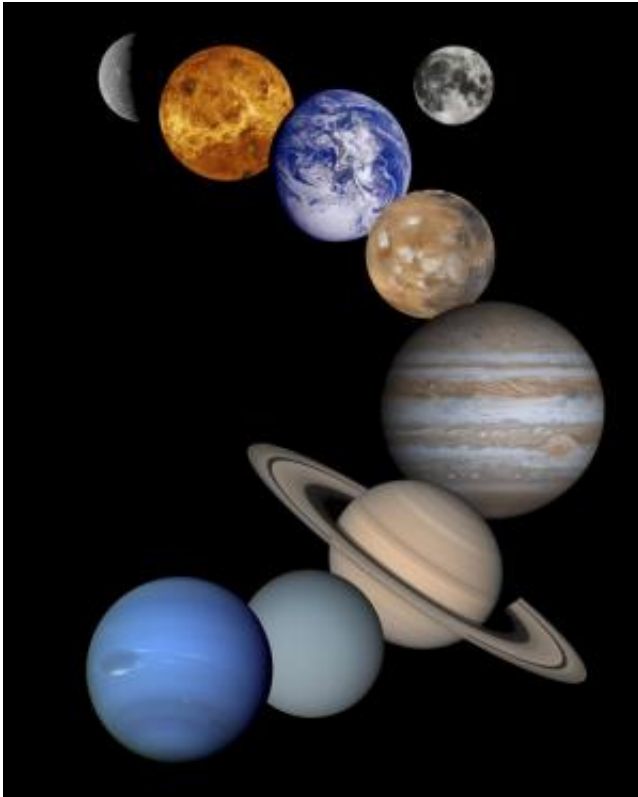


New dwarf planet found in our solar system

October 12 2016, by Bob Yirka



Solar system. Credit: NASA

(Phys.org)—A team of space scientists at the University of Michigan [has discovered](#) a dwarf planet that is approximately half the size of Pluto and twice as far from the sun. The sighting was [reported](#) by NPR, which interviewed team lead physicist David Gerdes. He told them credit goes to a group of students who were challenged to find some new objects to add to the ongoing construction of a galaxy map. Their efforts led to

software that can be used to analyze imagery from the Dark Energy Camera (the camera used as part of the ongoing Dark Energy Survey). It looks for objects that are moving in any given patch of sky—a sure sign that they are in our solar system.

The dwarf planet newly named 2014 UZ224 is so small—just 330 miles across—that the team is not certain it will retain its status as a dwarf planet, but for now, it joins Makemake, Sedna, Eris and, of course, Pluto, as known [dwarf planets](#) that exist in our solar system. It is also really far from us—approximately 14 billion kilometers—and quite far from the sun, taking approximately 1,140 years to make just one orbit. That puts it squarely in the Kuiper Belt along with countless other small objects and beyond the pull of Neptune's gravity.

The software developed by the team allows for tracking moving objects without capturing images taken on consecutive nights, allowing for a new kind of "connecting the dots" that reveals movement in the night sky. But the work is slow going—it took them two years to positively identify the new dwarf planet (hence the date in the name) but Gerdes is hopeful that the new software may help find other such bodies and perhaps even the mysterious Planet Nine—a theorized planet 10 times the size of Earth orbiting the sun in the far outreaches of our solar system. Several studies have found that other celestial objects are impacted by the actions of an unseen player, and most in the field suspect it is a big planet. Space scientists believe that mapping the solar system accurately may lead to a much better understanding of its origins.

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