

Pluto's moons a big surprise!

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Most inner moons in the solar system keep one face pointed towards their central planet. This is claimed to have resulted from a gravitational tidal locking effect that is evidence for the very old age of the solar system (allegedly about 5 Ga). Due to the fact that the moons are not point objects, gravitational theory tells us ‘tidal friction’ causes the moons to eventually tidally lock to their respective planets after a long period of time, thus leaving one face of the moon always pointed at the parent planet. Therefore the moons rotate on their axis once per revolution around their parent planet.

Spinning tops around Pluto

But the animation referenced below,¹ which has come from NASA’s recent analysis of Pluto, shows that this certainly isn’t the case with the small moons of Pluto. They behave like spinning tops. In the illustration below, Pluto is shown at centre with its moons Charon, Styx, Nix, Kerberos, and Hydra. New analysis has found that the 4 smaller moons—Styx, Nix, Kerberos, and Hydra—rotate surprisingly rapidly as they orbit Pluto (now known as a dwarf planet) with its companion moon Charon.

The small moons—Styx, Nix, Kerberos, and Hydra, in order of proximity to Pluto—all rotate much faster than the 20 to 38 days the moons take to orbit the Pluto-Charon system. Kerberos spins the slowest, once every 5.33 hours, whereas Hydra is the whirling dervish of the quartet, rotating once every 26 minutes.²

“These Pluto moons are essentially spinning tops, and

that radically changes the way we understand the dynamics of how they operate’, planetary scientist Mark Showalter of NASA’s New Horizons mission and of the SETI Institute in Mountain View, Calif., told *Eos* ... ‘This is unlike anything we’ve seen elsewhere in the solar system’, he added. ‘No one has ever seen a moon (like Hydra) that rotates 89 times during a single orbit.’”²

Prior to the New Horizons mission it was believed, from Hubble Space Telescope images, that the moons’ orbits were chaotic. But from the data recorded by the Long Range Reconnaissance Imager camera on the New Horizons spacecraft during its fly-by of this system, it has been determined that the brightness variations from the moons show very clear signs of periodicity, revealing that the moons were not so much tumbling but spinning in a regular fashion, and much faster than anyone expected. The images also reveal that Nix is orbiting backward and on its side.¹ In addition, from the animation above, you may note that the spin axes of the moons are precessing, just like a spinning top. (Towards the end of the video one moon is illustrated with its spin axis precessing or rotating.) This usually indicates a recent disturbance. Could it mean a recent creation?

Challenge to uniformitarian theory

And where does that leave the uniformitarian theory for the formation of the solar system? In big trouble, I suggest. Some *ad hoc* hypothesis must now be invented to explain this anomaly. Perhaps, they’ll say, Kuiper Belt objects continually are disturbing the moons and thus have not allowed them to settle into tidally locked positions over the alleged billions of years since they formed. Or that these are planetoids captured by the dwarf planet Pluto more recently and hence have not had time to lock up. But it will be more storytelling, for sure. Just wait for it!

And Nix rotates retrograde—backwards—similar to the way the planet Venus orbits the sun. Nix is also on its side similar to the planet Uranus (which has a 97.77% tilt to the plane of the solar system). These are anomalies that are contrary to the uniformitarian principle of the solar system forming out of a nebula cloud of gas and dust.^{3,4} In such a scenario all angular momentum is directed in the same plane. The angular momentum vector should be perpendicular to the plane of the alleged newly forming protoplanetary system. How can individual planets and moons spin retrograde? That would mean their angular momentum vector points in the opposite direction to the rest of the bodies. Also, of course there should really be little angular momentum in the outer planets as the sun allegedly spun up. But the opposite is needed, because the sun is observed to have relatively very little angular momentum.

Consider our sun with a mass representing 99.86% of the mass of the solar system but only 4% of its angular momentum. The planets on the other hand have a total combined mass of only 0.14% of the mass of the solar system yet 96% of its angular momentum. Most of the angular momentum of any solar system must reside initially

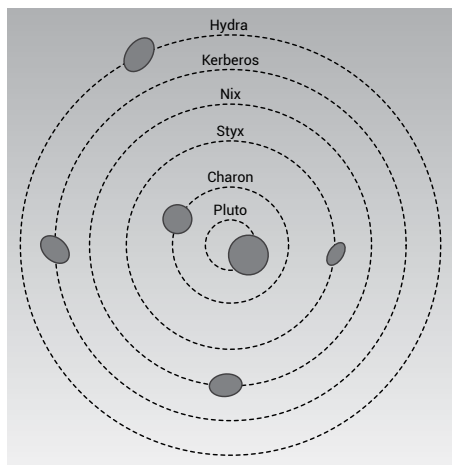


Figure 1. Pluto/Charon and their moons (NASA/JHUAPL/SwRI/Mark Showalter)

in the central core of the collapsing cloud, which eventually becomes the star, *according to the theory*. Yet, after some time nearly all the angular momentum has to be transferred to the planets somehow. *This is a huge problem for the theory.*^{2,5,6}

Earth's moon was created in a near perfect circular orbit and tidally locked for purposes of stability to Earth's tides and other designed-for-life features. Any disturbance to the orbit or any notion that it could have been captured run counter to its observed near perfectly circular orbit. Likewise, planets with tidally locked moons were created that way, as well as retrograde motion like Venus' spin. Naturalistic methods fail on all counts to account for such a feature.

In the case of Pluto, the moons may be captured smaller Kuiper Belt objects. Pluto itself may be such, since it has a highly eccentric orbit, even out of the plane of the rest of the planets. And the high spin rates of its moons testify at least that such an event did not occur billions of years ago, else they would be tidally locked today.

A created solar system, which is only 6,000 years old, is consistent with these observations. It is also consistent with tidally locked moons and anomalous rotation directions of some of the solar system bodies. Creation is a far simpler explanation for the formation of this system.

References

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