

Image: Colliding galaxies

July 2 2010, By Jeff Harrison



Astrophotographer Adam Block captured this image with the telescope at the Mount Lemmon SkyCenter showing two galaxies on a collision path.

(PhysOrg.com) -- NASA's Astronomy Picture of the Day website has published an image taken from the Mount Lemmon SkyCenter. The image, posted July 2, is that of the Keenan system of colliding galaxies



and was collected during an Astronomer Night program at the observatory by Adam Block, who is also the observing programs coordinator at the SkyCenter.

"A fascinating aspect to this image is that it resembles the outcome of a computer simulation designed to demonstrate the result of galactic collisions," Block said.

"Long ago I was inspired by the work of John Dubinski and others on what are called galactic mergers. Dubinski created code that ran on a <u>supercomputer</u> to simulate the merger of the <u>Milky Way</u>, where we live, and our nearest large neighbor, the Andromeda Galaxy, to create Milkomeda," Block said.

The movie that Dubinski made, part of his <u>GRAVITAS</u> series, is sometimes used at the Mount Lemmon SkyCenter's program. Block said, "There is a point in the simulation where the resulting pattern looks - to my eye - very similar to NGC 5216, the Keenan system (below)."





"Assuming that the physics are correct, it is remarkable that the universe is large enough to express examples of all potential possibilities. This lends credence to the idea that astrophysical computer simulations may be predictive," he said.

Block said the tidal stream that seems to connect the <u>galaxies</u> with their two counter-oriented tidal tails is represented well in the comparison. The pattern, he said, exists only briefly in the full simulation.

More information: antwrp.gsfc.nasa.gov/apod/



Provided by University of Arizona

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