Pluto-Bound CU Instrument Renamed For Girl Who Named Ninth Planet In 1930

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The University of Colorado at Boulder student-built science instrument on NASA's New Horizons mission to Pluto has been renamed to honor another famous student -- the 11-year-old girl who named the ninth planet more than 75 years ago.

For the rest of the New Horizons spacecraft's voyage to Pluto and the Kuiper Belt beyond, the Student Dust Counter -- the first science instrument on a NASA planetary mission to be designed, built and operated by students -- will be known as the Venetia Burney Student Dust Counter, or "Venetia," for short. The new name honors Venetia Burney Phair, now 87 and living in Epsom, England, who offered the name "Pluto" for the newly discovered ninth planet in 1930.

"It's fitting that we name an instrument built by students after Mrs. Phair, who was just a grade-school student herself in England when she made her historic suggestion of a name for Pluto," said New Horizons Mission principal investigator Alan Stern of the Southwest Research Institute in Boulder. "It's also a great honor to recognize Mrs. Phair for her historic, early role in the saga of the ninth planet."

"I feel quite astonished, and to have an instrument named after me is an honor," said Phair. "I never dreamt when I was 11 that after all these years, people would still be thinking about this and even sending a probe to Pluto. It's remarkable."

The instrument, designed, built and now being operated by students and

faculty advisers at CU-Boulder's Laboratory for Atmospheric and Space Physics, will begin full science operations in July after a series of post-launch tests and checkouts.

A New Horizons education and public outreach project, "Venetia" is counting and measuring dust particle impacts along the spacecraft's entire trajectory to produce information on particle production, transport and loss, said LASP Research Associate Mihaly Horanyi, principal investigator for the student instrument. The CU-Boulder team should be able to infer the population of comets and other distant colliding bodies that are too small to detect with telescopes, he said.

The dust counter also could be used to search for dust in the Pluto system, said Horanyi, a CU-Boulder professor of physics. Such dust might be generated by collisions of tiny impactors on Pluto and its moons, Charon, Nix and Hydra.

The device combines an 18-by-12-inch detector mounted on the outside of the spacecraft with an electronics box inside the craft that determines the mass and speed of the particles that hit the detector, he said. Because no dust detector has ever flown beyond 18 astronomical units from the sun -- nearly 1.7 billion miles or about the distance from Uranus to the sun -- the data will give scientists unprecedented measurements of the size and spatial distribution of dust in the outer solar system.

With faculty support, CU-Boulder students also will distribute and archive data from the instrument and lead a comprehensive education and outreach effort to bring their results and experiences to classrooms of all grades over the next two decades, said Horanyi.

"The project has involved dozens of students who had a unique opportunity to design, build, test and operate a real instrument in deep space," Horanyi said. "Generations of future students will be involved in

handing over their skills to the group that follows them."

New Horizons launched from Cape Canaveral, Fla., on Jan. 19, 2006. It zipped past the orbit of Mars on April 7 and next February will fly through the Jupiter system to collect data for science studies and a gravity assist. The assist will send it toward an historic rendezvous with Pluto and its moons in July 2015. The mission team also hopes to examine one or more objects in the Kuiper Belt beyond Pluto in succeeding years.

The spacecraft was built and is being operated at the Johns Hopkins University Applied Physics Laboratory in Laurel, Md., which manages the New Horizons mission for NASA.

Source: University of Colorado at Boulder