NASA's Newest Space Observatory Is Renamed

First Images Released

NASA has renamed the Space Infrared Telescope Facility, its newest space observatory, for the late astronomer Dr. Lyman Spitzer, Jr. The official name is now the Spitzer Space Telescope. The Spitzer Space Telescope program is managed by the Jet Propulsion Laboratory (JPL) for NASA's Office of Space Science in Washington D.C. Science operations are conducted at the Spitzer Science Center at the California Institute of Technology in Pasadena. In concert with the renaming, NASA also released the first scientific images from the Spitzer telescope.

The Spitzer telescope was built, integrated and tested at Lockheed Martin Space Systems Company facilities in Sunnyvale, California, and was launched on Aug. 25, 2003 from the NASA Kennedy Space Center in Florida. Space Systems is also providing mission support for Spitzer spaceflight operations in conjunction with the Jet Propulsion Laboratory (JPL) and the California Institute of Technology.

Lyman Spitzer, Jr. (1914-1997) was one of the twentieth century's most renowned scientists, and the first to advance the idea of placing a large telescope in space. After pointing out, in 1946, that a space-based telescope would avoid the blurring effects of Earth's atmosphere, Spitzer devoted the next 50 years of his career to making this vision a reality. His determined efforts led to two successful NASA space telescopes: the Copernicus satellite and the Hubble Space Telescope. He also made significant contributions to the fields of stellar dynamics, the interstellar medium and plasma physics.

"Lyman Spitzer was a personal friend and a great inspiration to me. We congratulate Dr. Spitzer's family on this distinct honor, and applaud NASA on the perfect choice in naming its fourth Great Observatory," said Jim Crocker, vice president, Civil Space at Lockheed Martin Space Systems. "In addition, the images released today from the Spitzer Space Telescope are breathtaking, and we look forward to the many important discoveries to come from this new window on the universe."

While the other Great Observatories have probed the universe with visible light (Hubble Space Telescope), gamma rays (Compton Gamma Ray Observatory) and x-rays (Chandra X-ray Observatory), the Spitzer Space Telescope observes the cosmos in the infrared. Its unprecedented sensitivity allows it to sense infrared radiation, or heat, from the most distant, cold and dust-obscured celestial objects. The versatility of the telescope and its three science instruments is revealed in the first images released today, available at http://www.spitzer.caltech.edu/ :

-- The Elephant's Trunk Nebula in the constellation Cepheus was wary of revealing its true nature until Spitzer cast its eye in that direction. Spitzer's infrared detectors unveil the brilliant hidden interior of this opaque cloud of gas and dust for the first time, exposing never-before-seen young stars. This Spitzer image of the dark globule in the emission nebula IC 1396 is in spectacular contrast to the view seen in visible light.
-- Red regions in the dusty spiral arms of galaxy Messier 81 represent infrared emissions from dustier parts of the galaxy where new stars are forming. The image illustrates the power of Spitzer to explore regions invisible in optical light, and to study star formation on a galactic scale.
-- A massive disc of dusty planet-forming debris encircling the nearby star Fomalhaut is revealed in its entirety by the Spitzer Space Telescope. Such debris discs are the leftover material from the building of a planetary system. While other telescopes have imaged the outer Fomalhaut disc, none was able to provide a full picture of the inner region. Spitzer's ability to detect dust at various temperatures allows it to fill in this missing gap, providing astronomers with insight into the evolution of planetary systems.
-- Data from Spitzer Space Telescope of the young star HH 46-IR and of a distant galaxy 3-1/4 billion light-years away, show the presence of water and small organic molecules not only in the here and now, but, for the first time, far back in time when life on Earth first emerged.

The Spitzer Space Telescope Program is a cornerstone of NASA's Origins Program, which follows the chain of events that began with the birth of the universe at the Big Bang. It seeks to understand the entire process of cosmic evolution from the formation of chemical elements, galaxies, stars and planets, through the mixing of chemicals and energy that cradles life on Earth, to the earliest self-replicating organisms and the profusion of life. In short, Origins hopes to answer the fundamental questions: Where did we come from? Are we alone?

Lockheed Martin Space Systems Company is one of the major operating units of Lockheed Martin Corporation. Space Systems designs, develops, tests, manufactures, and operates a variety of advanced technology systems for military, civil and commercial customers. Chief products include a full-range of space launch systems, including heavy-lift capability, ground systems, remote sensing and communications satellites for commercial and government customers, advanced space observatories and interplanetary spacecraft, fleet ballistic missiles and missile defense systems.

Headquartered in Bethesda, Md., Lockheed Martin employs about 130,000 people worldwide and is principally engaged in the research, design, development, manufacture and integration of advanced technology systems, products and services. A world leader in systems integration, Lockheed Martin is involved in a wide range of ballistic missile defense programs and activities for the U.S. and international government customers. The corporation reported 2002 sales of $26.6 billion.

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