



## The Heart of the Milky Way Revealed by NASA's Great Observatories



The Milky Way is a pancake-shaped galaxy filled with stars, gas, and dust. Because our solar system is inside the galaxy, our view towards the center of the Milky Way is almost completely blocked by gas and dust, making it appear dark as if we were peering towards a 'heart of darkness.'

The Hubble Space Telescope, Spitzer Space Telescope, and Chandra X-ray Observatory are known as NASA's Great Observatories. In celebration of the International Year of Astronomy 2009, the three telescopes working together have made an incredible image of the central region, the heart, of our Milky Way Galaxy.

In this spectacular image, infrared light and x-ray light peer through the dust to show us the intense activity near the galactic heart. Each telescope's view is shown in a different color.

Yellow represents the near-infrared observations of Hubble.  
Red represents the infrared observations of Spitzer.  
Blue and violet represent the x-ray observations of Chandra

Infrared views (red and yellow) show hundreds of thousands of stars, and immense glowing dust clouds heated by radiation and winds from those stars. X-rays (blue) reveal an energetic double star on the left as well as gas all across the region heated to millions of degrees.

The supermassive black hole at the center of the galaxy is located within the bright white area near middle of the image. The entire image width covers about one-half a degree, about the same width as the full moon.

The International Year of Astronomy 2009 celebrates the 400th anniversary of Galileo turning a telescope to the heavens and revolutionizing our view of the universe. This multi-wavelength view showcases not only stunning beauty, but also a wealth of scientific information that could not have been dreamed of by Galileo.

### Display courtesy of:

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