



### Pinwheel Galaxy

This infrared image from the Spitzer Space Telescope shows the galaxy also known as Messier 101. The image reveals that this outer red zone lacks organic molecules present in the rest of the galaxy. Dusty, carbon-containing organic molecules help in the formation of stars. In regions like the rim of the Pinwheel, as well as the very early universe, stars form without the organic dust. Astronomers don't know precisely how this works, so the rim of the Pinwheel provides them with a laboratory for examining the process.

For more beautiful galaxy images go to [www.spitzer.caltech.edu](http://www.spitzer.caltech.edu).

An  
infrared  
view of  
galaxies by

spitzer

National Aeronautics and  
Space Administration



### Sombrero Galaxy

Messier 104 is called the Sombrero Galaxy because in visible light only the near rim of dust can be seen, making it look as if it were the brim of a hat. This infrared image from the Spitzer Space Telescope reveals in red the bright, smooth ring of dust circling the galaxy.

The Sombrero galaxy is about 28 million light-years away. Spitzer detected infrared emission not only from the ring, but from the center of the galaxy too, where there is a huge black hole, believed to be a billion times more massive than our Sun.

Visit [www.spitzer.caltech.edu](http://www.spitzer.caltech.edu) to see what else Spitzer has revealed about familiar galaxies.

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