

Hiding Out Behind the Milky Way

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A leggy cosmic creature comes out of hiding in this new infrared view from NASA's Wide-field Infrared Survey Explorer, or WISE. Image credit: NASA/JPL-Caltech/UCLA

(PhysOrg.com) -- A leggy cosmic creature comes out of hiding in this new infrared view from NASA's Wide-field Infrared Survey Explorer, or WISE.

The spiral beauty, called IC 342 and sometimes the "hidden galaxy," is shrouded behind our own galaxy, the Milky Way. Stargazers and professional astronomers have a hard time seeing the galaxy through the Milky Way's bright band of <u>stars</u>, dust and gas. WISE's infrared vision cuts through this veil, offering a crisp view.

In a spiral galaxy like IC 342, dust and gas are concentrated in the arms. The denser pockets of gas trigger the formation of new stars, as represented here in green and yellow. The core, shown in red, is also bursting with young stars, which are heating up dust. Stars that appear



blue reside within our Milky Way, between us and IC 342.

This galaxy has been of great interest to astronomers because it is relatively close. However, determining its distance from Earth has proven difficult due to the intervening Milky Way. Astronomer Edwin Hubble first thought the galaxy might belong to our own Local Group of galaxies, but current estimates now place it farther away, at about 6.6 to 11 million light-years.

This image was made from observations by all four infrared detectors aboard WISE. Blue and cyan represent infrared light at wavelengths of 3.4 and 4.6 microns, which is primarily light from stars. Green and red represent light at 12 and 22 microns, which is primarily emission from warm dust.

Provided by JPL/NASA

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