



What is a Galaxy?



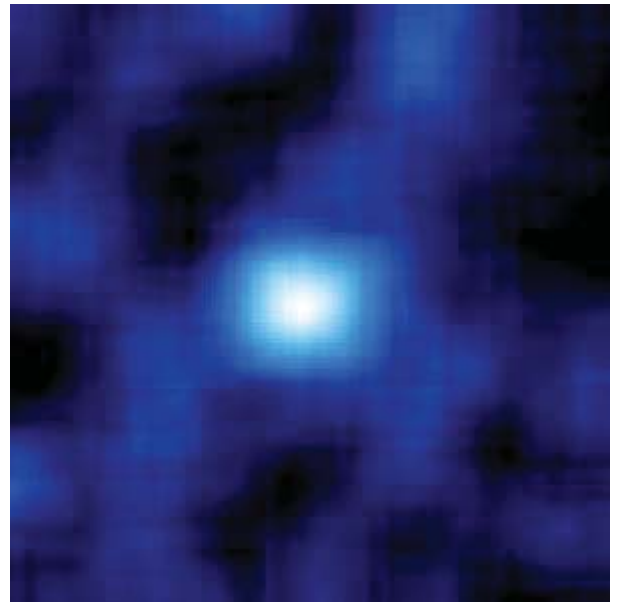
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7:30 p.m., Friday, October 25

Nebraska Union Auditorium, UNL City Campus

The stars in our night sky belong to the Milky Way galaxy. When we see a picture of a galaxy on TV or in a magazine, it is often a galaxy similar to how the Milky Way might instead appear from the outside: possessing beautiful spiral structure, with an easily visible conglomeration of stars, gas, and dust. Despite the impressions given by these typical depictions, the vast majority of the galaxies in the universe are puny dwarf galaxies much smaller and dimmer than the Milky Way. In fact, ~20 dwarf galaxies possessing only one millionth the number of stars in the Milky Way have recently been discovered. These discoveries have made astronomers question the very meaning of the word “galaxy”. This talk will highlight some basic history of astronomers’ understanding of galaxies, how computer simulations can help us understand galaxies, and how invisible galaxies are now guiding our understanding of what makes a galaxy, a galaxy.



The Willman 1 galaxy was discovered in 2004 hidden behind a dense field of stars in our own galaxy. This image from the Sloan Digital Sky Survey has been processed to highlight Willman 1 (white blob) amongst the foreground stars (Image: Beth Willman/ New York University/Sloan Digital Sky Survey)

This free, public talk is open to general audiences and is co-sponsored by the UNL Dept. of Physics and Astronomy and the Center for Science, Mathematics and Computer Education.