Hubble captures gravitationally bound galaxies NGC 3227 and NGC 3226

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Hubble looked at NGC 3227 and 326 as part of a program to measure black hole masses by observing the dynamics of gas at the centers of bright cluster galaxies. The color red in this image represents both visible red and near infrared wavelengths of light.

This NASA Hubble Space Telescope image finds the large spiral galaxy, NGC 3227, wrapped in a turbulent gravitational dance with its companion, the elliptical galaxy NGC 3226. The twosome—collectively known as Arp 94—is relatively nearby, between 50 and 60 million light-years away toward the constellation Leo, the Lion. A close look at the area between the two galaxies reveals faint tidal streams of gas and dust that link the pair in their gravitational dance.

NGC 3227 is a Seyfert galaxy, a type of galaxy with a very active nucleus. Seyfert galaxies hold supermassive black holes at their cores. As matter spirals into the black hole, it releases vast amounts of radiation along the black hole's axis of rotation. giving the galaxy its active nucleus.