



NGC 1097

NASA's Hubble Space Telescope can peer deep into the heart of distant galaxies. NGC 1097, pictured here, is a “barred spiral galaxy” containing wispy tendrils of dust and a thick bar of stars at its center, as well as a supermassive black hole 100 million times the mass of our Sun. As matter falls into the black hole, it emits radiation, creating the bright ring seen in the galaxy’s center.

NGC 1097 is 48 million light-years from Earth in the constellation Fornax. Interactions with a companion galaxy have distorted the galaxy’s shape, and scientists have observed three supernovae within the galaxy since Hubble began operations in 1990. This image was taken using seven different light filters, allowing scientists to study intricate details of the object.

Hubble Space Telescope – Advanced Camera for Surveys and Wide Field Camera 3

NASA, ESA, D. Sand, and K. Sheth