

# Hubble Illuminates Cluster of Diverse Galaxies

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Credit: NASA, ESA, and The Hubble Heritage Team (STScI/AURA)

Acknowledgment: J. Blakeslee (Washington State University)

This image from NASA's Hubble Space Telescope shows the diverse collection of galaxies in the cluster Abell S0740 that is over 450 million light-years away in the direction of the constellation Centaurus.

The giant elliptical ESO 325-G004 looms large at the cluster's center. The galaxy is as massive as 100 billion of our suns. Hubble resolves

thousands of globular star clusters orbiting ESO 325-G004. Globular clusters are compact groups of hundreds of thousands of stars that are gravitationally bound together. At the galaxy's distance they appear as pinpoints of light contained within the diffuse halo.

Other fuzzy elliptical galaxies dot the image. Some have evidence of a disk or ring structure that gives them a bow-tie shape. Several spiral galaxies are also present. The starlight in these galaxies is mainly contained in a disk and follows along spiral arms.

This image was created by combining Hubble science observations taken in January 2005 with Hubble Heritage observations taken a year later to form a 3-color composite. The filters that isolate blue, red and infrared light were used with the Advanced Camera for Surveys aboard Hubble.

Source: Space Telescope Science Institute

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