

Hubble focuses on large lenticular galaxy 1023

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Credit: NASA, ESA, and G. Sivakoff (University of Alberta); Image processing: G. Kober (NASA Goddard/Catholic University of America)

This new NASA Hubble Space Telescope image looks at one of the nearest, massive lenticular galaxies to Earth, NGC 1023 some 36 million light-years away. Lenticular galaxies get their names from their edge-on appearance that resembles a lens. They are intermediate galaxies between ellipticals and spirals. Lenticular galaxies have a large central bulge and a flattened disk like spirals, but no spiral arms. Like ellipticals, lenticular galaxies don't have much gas and dust, and also have mainly

old stars.

NGC 1023 is not alone in this image. The fuzzy blue patch to the lower left of the galaxy is NGC 1023a, an irregular satellite galaxy of its large lenticular neighbor. The galaxy pair was part of a study that looked at multiple [star systems](#) and star clusters in galaxies beyond our own Milky Way. The researchers found 81 long-lived open star clusters (loosely bound groups of a few tens to a few hundred stars) in NGC 1023's disk as well as 27 young blue star clusters. Half of the young blue [star clusters](#) are associated with the satellite galaxy, while the rest are spatially associated with the neutral hydrogen gas that surrounds the large lenticular galaxy.

The image uses data from Hubble's Advanced Camera for Surveys. Additional gap-filling data provided by the Pan-STARRS collaboration. The color blue represents visible blue light while the color orange represents near [infrared light](#).

Provided by NASA's Goddard Space Flight Center

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