

Image: Hubble spies bar, baby stars

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Credit: ESA/Hubble & NASA, A. Riess et al.

The galaxy depicted in this image taken by the NASA/ESA Hubble Space Telescope is a barred spiral known as NGC 7541, in the constellation of Pisces (the Fishes).



A barred spiral is a galaxy with whirling, pinwheeling, spiral arms, and a bright center that is intersected by a bar of gas and stars. This bar cuts directly through the galaxy's central region, and is thought to invigorate the region somewhat, sparking activity and fueling myriad processes that may otherwise have never occurred or have previously ground to a halt (star formation and active galactic nuclei being key examples). We think bars exist in up to two-thirds of all spiral galaxies, including our own home, the Milky Way.

NGC 7541 is actually observed to have a higher-than-usual star formation rate, adding weight to the theory that spiral bars act as stellar nurseries, corralling and funneling inward the material and fuel needed to create and nurture new baby stars. This galaxy and its nearby companion NGC 7537 make up a pair of galaxies located about 110 million light-years away from us.

Provided by NASA's Goddard Space Flight Center

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