Hubble images NGC 3430, a classic spiral galaxy

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This NASA/ESA Hubble Space Telescope image features the majestic spiral galaxy NGC 3430. Credit: ESA/Hubble & NASA, C. Kilpatrick

This NASA/ESA Hubble Space Telescope image treats viewers to a wonderfully detailed snapshot of the spiral galaxy NGC 3430 that lies

100 million light-years from Earth in the constellation Leo Minor.

Several other galaxies, located relatively nearby to this one, are just beyond the frame of this image; one is close enough that gravitational interaction is driving some star formation in NGC 3430—visible as bright-blue patches near to but outside of the galaxy's main spiral structure.

This fine example of a galactic spiral holds a bright core from which a pinwheel array of arms appears to radiate outward. Dark dust lanes and bright star-forming regions help define these spiral arms.

NGC 3430's distinct shape may be one reason why astronomer Edwin Hubble used to it to help define his classification of galaxies. Namesake of the Hubble Space Telescope, Edwin Hubble authored a paper in 1926 that outlined the classification of some four hundred galaxies by their appearance—as either spiral, barred spiral, lenticular, elliptical, or irregular.

This straightforward typology proved extremely influential, and the detailed schemes astronomers use today are still based on Edwin Hubble's work. NGC 3430 itself is a spiral lacking a central bar with open, clearly defined arms—classified today as an SAc galaxy.

Provided by NASA

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