



Barred Spiral Galaxy NGC 1300

The Hubble telescope captured a display of starlight, glowing gas, and silhouetted dark clouds of interstellar dust in this image of the barred spiral galaxy NGC 1300. NGC 1300 lies roughly 69 million light-years away and is considered a prototypical barred spiral galaxy. Barred spirals differ from normal spiral galaxies in that the arms of the galaxy do not spiral all the way into the center, but are connected to the two ends of a straight bar of stars containing the nucleus at its center.

With Hubble's resolution, many never before seen fine details are revealed throughout the galaxy's arms, disk, bulge, and nucleus. Blue and red supergiant stars, star clusters, and star-forming regions are well resolved across the spiral arms. Dust lanes trace out fine structures in the disk and bar. Numerous, more distant galaxies are visible in the background, even through the densest regions of NGC 1300.

In the core of NGC 1300's larger spiral structure, the nucleus shows its own extraordinary and distinct spiral structure that is about 3,300 light-years across. Only galaxies with large-scale bars appear to have these secondary inner disks – a spiral within a spiral. Astronomers refer to these as 'grand design' galaxies.

Hubble Space Telescope – Advanced Camera for Surveys

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