Grand Swirls



This <u>new Hubble image</u> shows NGC 1566, a beautiful galaxy located approximately 40 million light-years away in the constellation of Dorado (The Dolphinfish). NGC 1566 is an intermediate spiral galaxy, meaning that while it does not have a well defined bar-shaped region of stars at its center — like barred spirals — it is not quite <u>an unbarred spiral either</u>.

The small but extremely bright nucleus of NGC 1566 is clearly visible in this image, a telltale sign of its membership of the Seyfert class of galaxies. The centers of such galaxies are very active and luminous, emitting strong bursts of radiation and potentially harboring supermassive black holes that are many millions of times the mass of the Sun.

NGC 1566 is not just any Seyfert galaxy; it is the second brightest Seyfert galaxy known. It is also the brightest and most dominant member of the Dorado Group, a loose concentration of galaxies that together comprise one of the richest galaxy groups of the southern hemisphere. This image highlights the beauty and awe-inspiring nature of this unique galaxy group, with NGC 1566 glittering and glowing, its bright nucleus framed by swirling and symmetrical lavender arms.

This image was taken by Hubble's Wide Field Camera 3 (WFC3) in the near-infrared part of the spectrum. A version of the image was entered into the <u>Hubble's Hidden Treasures</u> image processing competition by Flickr user <u>Detlev Odenthal</u>.

Credit: ESA/Hubble & NASA Treasures image processing competition by Flickr user Det58 (http://www.flickr.com/photos/76780020@N07/).

About the Image

Id: potw1422a Release date: 2 June 2014, 10:00 Size: 4182 x 3897 px

Coordinates

Position (RA): 4 20 0.27 (Dec): -54° 56' 12.02" Field of view: 2.77 x 2.58 arcminutes Orientation: North is 129.1° left of vertical

View in ESA Sky

View in WorldWide Telescope

Colors & filters

Band	Wavelength	Telescope
Ultraviolet UV	275 nm	Hubble Space Telescope WFC3
Optical B	438 nm	Hubble Space Telescope WFC3
Optical V	555 nm	Hubble Space Telescope WFC3
Infrared I	814 nm	Hubble Space Telescope WFC3
Ultraviolet U	336 nm	Hubble Space Telescope WFC3

Spiral galaxy NGC 1566



This image, taken by astronomers using the US Department of Energy-fabricated Dark Energy Camera on the Víctor M. Blanco 4-meter Telescope at Cerro Tololo Inter-American Observatory, a Program of NSF's NOIRLab, captures the galaxy NGC 1566 as it twirls, flinging its arms through the vastness of space. Colloquially nicknamed the Spanish Dancer, this spiral galaxy is often studied by astronomers learning about galaxy groups, stars of different ages, and galactic black holes.

Credit:

Dark Energy Survey/DOE/FNAL/DECam/CTIO/NOIRLab/NSF/AURA Image processing: T.A. Rector (University of Alaska Anchorage/NSF's NOIRLab), J. Miller (Gemini Observatory/NSF's NOIRLab), M. Zamani & D. de Martin (NSF's NOIRLab)

About the Image

ld: noirlab2208a Release date: Feb. 22, 2022 8:00 a.m. Size: 4371 x 3514 px Related releases: noirlab2208

About the Object Name: NGC 1566

Distance: 20 million light years

Constellation: Dorado

Coordinates Position (RA): 4 20 2.51 (Dec): -54° 56' 30.16"

Field of view: 19.15 x 15.39 arcminutes Orientation: North is 89.7° left of vertical

View in WorldWide Telescope

Colors & filters

Band	Wavelength	Telescope
Optical g	486 nm	<u>Víctor M. Blanco 4-meter</u> <u>Telescope</u> <u>DECam</u>
Optical r	646 nm	<u>Víctor M. Blanco 4-meter</u> <u>Telescope</u> <u>DECam</u>
Optical i	785 nm	<u>Víctor M. Blanco 4-meter</u> <u>Telescope</u> <u>DECam</u>
Optical Y	990 nm	<u>Víctor M. Blanco 4-meter</u> <u>Telescope</u> <u>DECam</u>
Optical z	919 nm	<u>Víctor M. Blanco 4-meter</u> <u>Telescope</u> <u>DECam</u>

NGC1566 - JWST.jpg Wikimedia Commons file



<u>Original file</u> (1,359 × 2,033 pixels, file size: 828 KB, MIME type: image/jpeg) Retrieved from "<u>https://commons.wikimedia.org/w/index.php?title=File:NGC1566_-</u> JWST.jpg&oldid=749568895"

Description: NASA / ESA / CSA / Judy Schmidt

The latest view of another dusty spiral galaxy from JWST's MIRI. Took a bit of doing this time because the pipeline images available from the archive had a lot of alignment issues. I had to manually mosaic this. Luckily it wasn't too difficult, or at least my human brain handled it fine. Not sure what is so confounding to a computer brain.

Red (screen layer mode): MIRI F2100W Orange: MIRI F1130W Cyan: MIRI F770W Extra overall brightness in grayscale: MIRI F1000W North is 1.5° counter-clockwise from up. Date: 25 November 2022, 15:15 Source image: <u>NGC 1566</u> Author: <u>Judy Schmidt</u>

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