

Image: Hubble's barred and booming spiral galaxy

January 8 2018



Credit: ESA/Hubble & NASA

This image, captured by the NASA/ESA Hubble Space Telescope's Wide Field Camera 3 (WFC3), shows a galaxy named UGC 6093. As can be easily seen, UGC 6093 is something known as a barred spiral galaxy—it has beautiful arms that swirl outwards from a bar slicing through the galaxy's center.

It is classified as an active galaxy, which means that it hosts an [active](#)

galactic nucleus, or AGN: a compact region at a galaxy's center within which material is dragged towards a supermassive black hole.

As this black hole devours the surrounding matter it emits intense radiation, causing it to shine brightly.

But UGC 6093 is more exotic still. The galaxy essentially acts as a giant astronomical laser that also spews out light at microwave, not visible, wavelengths—this type of object is dubbed a megamaser (maser being the term for a microwave laser). Megamasers such as UGC 6093 can be some 100 million times brighter than masers found in galaxies like the Milky Way.

Provided by NASA

Citation: Image: Hubble's barred and booming spiral galaxy (2018, January 8) retrieved 2 October 2025 from <https://phys.org/news/2018-01-image-hubble-barred-booming-spiral.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.
--