

# Hubble spies a spiral snowflake

May 13 2016, by Ashley Morrow

---



The striking face-on spiral galaxy NGC 6814, whose luminous nucleus and

spectacular sweeping arms, rippled with an intricate pattern of dark dust, are captured in this NASA/ESA Hubble Space Telescope image. Credit: ESA/Hubble & NASA; Acknowledgement: Judy Schmidt

Together with irregular galaxies, spiral galaxies make up approximately 60 percent of the galaxies in the local universe. However, despite their prevalence, each spiral galaxy is unique—like snowflakes, no two are alike. This is demonstrated by the striking face-on spiral galaxy NGC 6814, whose luminous nucleus and spectacular sweeping arms, rippled with an intricate pattern of dark dust, are captured in this NASA/ESA Hubble Space Telescope image.

NGC 6814 has an extremely bright nucleus, a telltale sign that the galaxy is a Seyfert galaxy. These [galaxies](#) have very active centers that can emit strong bursts of radiation. The luminous heart of NGC 6814 is a highly variable source of X-ray radiation, causing scientists to suspect that it hosts a [supermassive black hole](#) with a mass about 18 million times that of the sun.

As NGC 6814 is a very active galaxy, many regions of ionized gas are studded along its [spiral arms](#). In these large clouds of gas, a burst of star formation has recently taken place, forging the brilliant blue stars that are visible scattered throughout the galaxy.

Provided by NASA's Goddard Space Flight Center

Citation: Hubble spies a spiral snowflake (2016, May 13) retrieved 20 April 2024 from <https://phys.org/news/2016-05-hubble-spies-spiral-snowflake.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.