

Image: Hubble eyes galactic refurbishment

May 4 2015, by Karl Hille



Credit: ESA/Hubble & NASA, Acknowledgement: Luca Limatola

The smudge of stars at the center of this NASA/ESA Hubble Space Telescope image is a galaxy known as UGC 5797. UGC 5797 is an emission line galaxy, meaning that it is currently undergoing active star formation. The result is a stellar population that is constantly being refurbished as massive bright blue stars form. Galaxies with prolific star formation are not only veiled in a blue tint, but are key to the continuation of a stellar cycle.

In this image UGC 5797 appears in front of a background of spiral

galaxies. Spiral galaxies have copious amounts of dust and gas—the main ingredient for stars—and therefore often also belong to the class of emission line galaxies.

Spiral galaxies have disk-like shapes that drastically vary in appearance depending on the angle at which they are observed. The collection of spiral galaxies in this frame exhibits this attribute acutely: Some are viewed face-on, revealing the structure of the [spiral arms](#), while the two in the bottom left are seen edge-on, appearing as plain streaks in the sky. There are many spiral galaxies, with varying colors and at different angles, sprinkled across this image—just take a look.

Provided by NASA

Citation: Image: Hubble eyes galactic refurbishment (2015, May 4) retrieved 25 April 2024 from <https://phys.org/news/2015-05-image-hubble-eyes-galactic-refurbishment.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.