

# Image: Hubble's cosmic fireflies

December 18 2017

---



Credit: ESA/Hubble & NASA

Galaxies glow like fireflies in this spectacular NASA/ESA Hubble Space Telescope image. This flickering swarm of cosmic fireflies is a rich cluster of galaxies called Abell 2163.

Abell 2163 is a member of the Abell catalog, an all-sky catalog of over 4,000 [galaxy clusters](#). It is particularly well-studied because the material sitting at its core (its intracluster medium) exhibits exceptional properties, including a large and bright radio halo and extraordinarily high temperatures and X-ray luminosities. It is the hottest [cluster](#) in the

catalog! Observing massive clusters like Abell 2163 can contribute to the study of dark matter, and provide a new perspective on the distant Universe via phenomena such as gravitational lensing.

This image was taken by Hubble's Advanced Camera for Surveys and Wide-Field Camera 3, partially for an extensive observing program called RELICS. The program is imaging 41 massive galaxy clusters to find the brightest distant [galaxies](#), which will be studied in more detail using both current telescopes and the future James Webb Space Telescope.

Provided by NASA

Citation: Image: Hubble's cosmic fireflies (2017, December 18) retrieved 10 April 2024 from <https://phys.org/news/2017-12-image-hubble-cosmic-fireflies.html>

<p>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.</p>
--