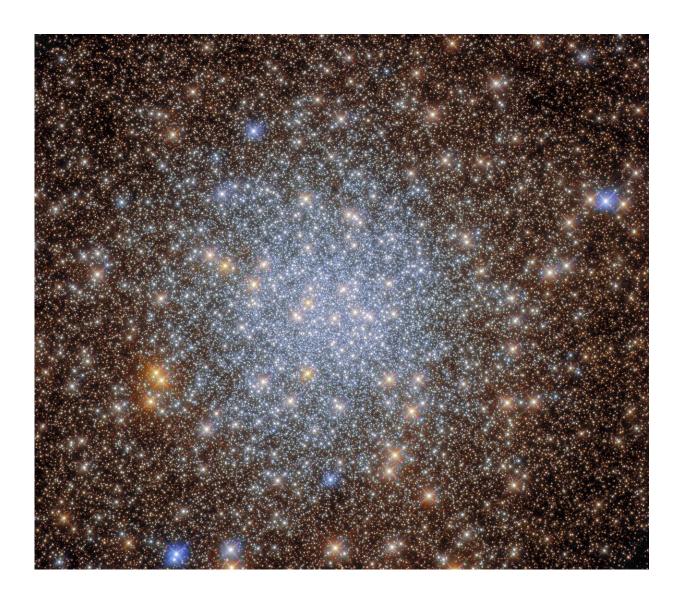


Hubble delves into cosmic treasure trove

July 5 2022, by Claire Andreoli



Credit: ESA/Hubble & NASA, R. Cohen



This image from the NASA/ESA Hubble Space Telescope captures the sparkling globular cluster NGC 6569 in the constellation Sagittarius. Hubble explored the heart of this cluster with both its Wide Field Camera 3 and Advanced Camera for Surveys, revealing a glittering hoard of stars in this astronomical treasure trove.

Globular clusters are stable, tightly bound clusters containing tens of thousands to millions of stars and are associated with all types of galaxies. The intense gravitational attraction of these closely packed clusters of stars means that <u>globular clusters</u> have a regular spherical shape with a densely populated center, as seen at the heart of this starstudded image.

This observation comes from an investigation of globular clusters which lie close to the center of the Milky Way. Previous surveys avoided these objects, as the dusty center of our galaxy blocks their light and alters the colors of the stars residing in them. A star's color is particularly important for <u>astronomers</u> studying <u>stellar evolution</u>, and can give astronomers insights into their ages, compositions, and temperatures.

The astronomers who proposed these observations combined data from Hubble with data from astronomical archives, allowing them to measure the ages of globular clusters including NGC 6569. Their research also provided insights into the structure and density of globular clusters towards the center of the Milky Way.

Provided by NASA's Goddard Space Flight Center

Citation: Hubble delves into cosmic treasure trove (2022, July 5) retrieved 10 July 2024 from <u>https://phys.org/news/2022-07-hubble-delves-cosmic-treasure-trove.html</u>

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.