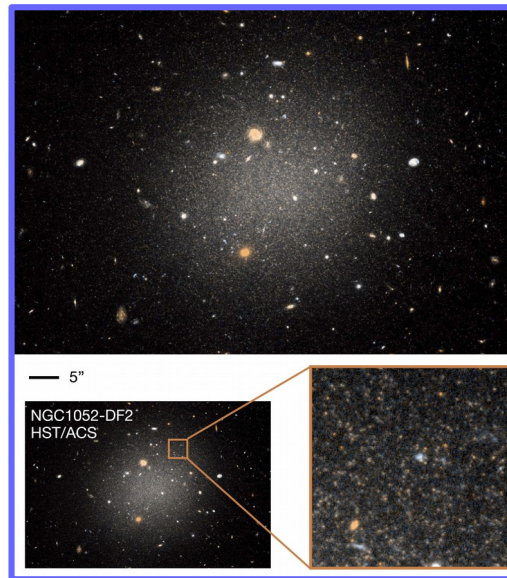


Title: Globular clusters in ultra diffuse galaxies

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Description:

Globular clusters (GCs) are among the oldest systems formed in the Universe and thus trace the assembly history of galaxies. They reside in all types of galaxies, from giant to dwarf galaxies. Their metallicity, age, and mass carry valuable clues about the initial conditions at which they were formed and their abundance, distribution, and motion unravels information about the host galaxies. In the regime of dwarf galaxies, there exists a population of galaxies with a very large diameter and with low surface brightness, the so-called ultra diffuse galaxies (UDGs). Initial investigations of the GC systems of UDGs in clusters of galaxies found them to be extraordinarily rich. However, subsequent studies have generally revised these findings downwards and these cluster UDGs may not be representative of the UDG population in general.

For this project, the statistical properties of the GC populations of a large sample of newly identified UDGs will be analysed using recently obtained Hubble Space Telescope data. The interpretation of the results will then be discussed in the context of the proposed formation scenarios for these ultra diffuse galaxies.