

Poster at Splinter Meeting

Splinter F

NGC 2419 – STRÖMGREN *uvby* OF AN ODDBALL GLOBULAR
CLUSTER

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NGC 2419 truly is an oddball among the Galactic globular clusters, both chemically and in terms of its outlier position in the size-luminosity diagram. Here we use Strömgren *uvby* photometry of the cluster to obtain a clean sample of cluster members, to measure $[\text{Fe}/\text{H}]$ of individual red giants, and to study light-element variations.

We find excellent agreement of photometric $[\text{Fe}/\text{H}]$ and literature spectroscopic $[\text{Fe}/\text{H}]$ for individual stars. Using a realistic model for the – non-Gaussian– photometric uncertainties, we study the cluster’s intrinsic $[\text{Fe}/\text{H}]$ distribution. This yields no significant spread in $[\text{Fe}/\text{H}]$, making NGC 2419 very different from other massive clusters such as ωCen that is similarly suspected to be the remnant nuclei of an accreted galaxy. Finally, we find evidence for a spread, and possible bimodality, in CN abundance, similar to other globular clusters at comparable metallicity.