GLOBULAR CLUSTER SYSTEMS IN FORNAX

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We present V and I photometry of the globular cluster systems of the early-type galaxies NGC 1374, NGC 1379, NGC 1387, NGC 1427, and NGC 1399, obtained with the 100 inch telescope of Las Campanas Observatory.

The widths of the color distributions of the four E galaxies are compatible with the errors of our photometry, pointing to a single globular cluster population. In NGC 1399 the color distribution is much broader, confirming previous results of the wide range of age/metallicity of the globular clusters. No gradient in color was seen in any galaxy, rising again the question of the reality of such a gradient in NGC 1399.
The individual distances obtained from the globular cluster luminosity function are in good agreement within our sample, as expected for the compact Fornax cluster, and lead to a turn-over magnitude of $V = 23.7 \pm 0.2$ mag, or a distance of $(m - M) = 31.1 \pm 0.2$, assuming an absolute turn-over magnitude of $V = -7.4$ (following W.E.Harris, 1991, ARAA 29, 543). This confirms results from the PNLF and SBF methods, that Fornax and the core of Virgo are at equal distance from us.

We also investigate clustering properties, colours and surface brightnesses of dwarf and LSB galaxies in Fornax. Within a few arcmin of NGC 1399 the faint galaxy density rises significantly towards the center, which makes an accretion scenario and a correlation with the extraordinary rich GCS of NGC 1399 likely.