

## METALLICITY GRADIENT IN THE GLOBULAR CLUSTER SYSTEM AROUND NGC 1399

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We present integrated Washington photometry (C,M,T<sub>1</sub>) of globular clusters in the field of NGC1399. Conflicting evidence on the presence of a (B-V) color gradient as a function of galactocentric distance has been reported for this cluster system. Here we investigate the existence of this gradient using the (C-T<sub>1</sub>) index, which is twice as metallicity sensitive as (B-V).

The NGC1399 region was observed with the CTIO 4m telescope and the RCA No.1 prime focus CCD system. The data were obtained for a 3' by 5' field centered on the galaxy, plus three fields located 2.5' towards the north and south and 4.5' towards the west. The background galaxy halo was empirically removed through median filtering. Photometry of stellar images (globular clusters appear unresolved at the distance of NGC1399) was performed using a version of DAOPHOT kindly provided by P. Stetson.

The behavior of the observed (C-T<sub>1</sub>) mean colors as a function of galactocentric radius is depicted in Figure 1, where the dashed line is a least squares fit excluding the outermost bin. The

discrepant value of the last bin suggests that field contamination, which becomes more important outwards, has become significant. Figure 1 suggests a color gradient that amounts to 0.14<sup>m</sup> in (C-T<sub>1</sub>). The intrinsic color distribution of the cluster population is consistent with a gaussian shape with a mean value (C-T<sub>1</sub>)=1.53 and an intrinsic dispersion of 0.28.

We derive a mean metal abundance of  $-0.93 \pm 0.2$ . The intrinsic dispersion of the metallicity distribution is  $\sim 0.7$  dex. The mean metal abundance of the clusters is  $\sim 0.75$  dex more metal-poor than the mean metallicity of the background halo at similar radii.

