

Abstract Submitted
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On the Na-O Anticorellation and Other Abundances in NGC 1261 DAN FILLER, INESE I. IVANS, JENNIFER SIMMERER, The University of Utah — A key to understanding our Milky Way Galaxy lies in globular clusters, which are spherical clusters of millions of some of the oldest stars in the Galaxy. Globular clusters are extremely old and they intrinsically possess information about their host galaxy. In this talk, we present the first high-resolution spectroscopic analysis of the Galactic globular cluster NGC 1261. Multi-line equivalent width analysis and spectrum syntheses were employed to derive elemental abundances. The overall chemical enrichment, as measured by the abundance of iron, $[\text{Fe}/\text{H}] = -1.19 \pm 0.02$ ($\sigma = 0.01$), is within expectations based upon photometric estimates. However, the Na-O anticorrelation, spanning a factor of 15 in sodium, is larger than any other cluster measured to date. We will also present abundances for the neutron capture element Eu, (created from core collapse supernovae [SNe]), abundances for the alpha elements (Mg, Ca, Si and Ti), created by both core collapse and thermonuclear SNe, iron peak elements (V, Cr, Mn, Co and Ni) and the light elements (C, N and O), which trace stellar nucleosynthesis.

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