

Abstract Submitted
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The Low Mass Luminosity Function in Globular Clusters CLAIRE

DICKEY, Pomona College — We present a novel technique for constraining the full stellar luminosity distribution for globular clusters through the measurement of the fraction of light from resolved stars as a function of the total integrated cluster light. This technique enables the characterization of the full range of the mass distribution of extra-galactic clusters, which will in turn provide a clearer picture of the formation and early evolution of the host galaxy. Our sample consists of six old, metal-poor globular clusters in the Large Magellanic Cloud, imaged with the WFPC2 instrument of the Hubble Space telescope, and we present color-magnitude diagrams down to $V \sim 25$ mag in addition to the mass and luminosity functions.

Claire Dickey
Pomona College

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