Abstract Submitted
for the TSS21 Meeting of
The American Physical Society

Chemical Abundance Analysis of Cetus II KAITLIN WEBBER, TERESE HANSEN, JENNIFER MARSHALL, Texas AM University — Ultra-faint dwarf galaxies are low mass and luminosity galaxies that contain very metal poor stars. Abundance analysis of these stars provide insight to the early universe and galaxy evolution. We performed a chemical abundance analysis on the ultra-faint dwarf galaxy Cetus II. We derived abundances of one star in Cetus II from a high-resolution spectrum. The star has a low Magnesium abundance of [Mg/Fe]=0.07, while the calcium abundance of [Ca/Fe]=0.31 reflects the expected alpha-enhancement seen in metal-poor stars. A low Magnesium abundance with normal abundances for Calcium and other alpha elements signals that these elements were created by a star with a mass M 20 $M_\odot$.

Kaitlin Webber
Texas A
M University

Electronic form version 1.4