

Abstract Submitted  
for the TSF14 Meeting of  
The American Physical Society

**M-Dwarf Metallicity through Analysis of Binary Partners**

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We present work on determining the metallicity of M-dwarfs through analysis of M-star containing binary pairs and discuss its potential use with regards to exoplanet host star population studies. It is notoriously difficult to directly measure the metallicity of M-dwarf stars via their spectra due to the complexity of their composition; by study of the spectra of M-dwarfs and their binary partners, a technique to determine the metallicity of M-dwarfs via spectra analysis can be developed. Assuming that the metallicity of two stars in a binary pair is similar, by studying the metal content of the more easily measured solar type star and correlating that to various spectra line indices in the accompanying M-dwarf, we can indirectly measure the metal content of the M-dwarf. We use both high and low resolution spectra of 50+ halo binary stars in the northern hemisphere collected at McDonald Observatory to perform this analysis.

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Date submitted: 26 Sep 2014

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