

# SPECTROSCOPIC AND PHOTOMETRIC OBSERVATIONS OF MASSIVE WHITE DWARFS IN THE $\mu$ TAU STELLAR ASSOCIATION

Kurtis A. Williams<sup>1</sup>, Nicole Reindl<sup>2</sup>, Klaus Werner<sup>3</sup>, Michael Bolte<sup>4</sup>, Isabel Kain<sup>4</sup>

<sup>1</sup> *Department of Physics & Astronomy, Texas A&M University-Commerce, PO Box 3011, Commerce, TX, 75429, USA*

<sup>2</sup> *Institut für Physik und Astronomie, Universität Potsdam, Haus 28, Karl-Liebknecht-Str. 24/25, 14476, Potsdam-Golm, Germany*

<sup>3</sup> *Institute for Astronomy and Astrophysics, Kepler Center for Astro and Particle Physics, Eberhard Karls University, Sand 1, D-72076 Tübingen, Germany*

<sup>4</sup> *UCO/Lick Observatory, University of California Santa Cruz, Santa Cruz, CA, 95064, USA*

White dwarf members of simple stellar populations such as open star clusters and stellar associations are especially powerful probes of post main sequence and white dwarf evolution, as many properties such as stellar ages and metallicity are known. Gagné et al (2020) announced the discovery of the 60 Myr old  $\mu$  Tau Association, located only 150 pc away. This association contains two very hot, massive white dwarf - a DA and a WD of uncertain spectral type. We present follow up photometric and high signal-to-noise spectroscopic observations of both white dwarfs. From this we better determine the mass of the DA. We also find that the other WD is rapidly rotating and analyze the phase-resolved spectrum of this peculiar object.