Improving Ages of Individual White Dwarfs

E.J. Jeffery[1], T. von Hippel[2], E. Robinson[2], D.A. van Dyk[3], D.C. Stenning[3]

[1] *California Polytechnic State University, San Luis Obispo;* [2] *Embry-Riddle Aeronautical University;* [3] *University College London;* [4] *Simon Fraser University*

White dwarfs are an important chronometer for measuring the ages of stellar populations. By combining high precision parallaxes from Gaia and photometry from surveys such as Pan-STARRS and SDSS, we apply a sophisticated Bayesian algorithm to determine ages and other fundamental properties for individual white dwarfs. To improve and calibrate our methods, we apply our technique to known white dwarfs in open clusters, as well as a subset of well-studied DA field white dwarfs. With an eye towards our ultimate goal of applying this technique to every white dwarf in the Gaia catalog, these tests provide important understanding of any systematics that arise when using different filter sets, model sets, etc.