A Census of White Dwarfs Within 40 Parsecs of the Sun

M.-M. Limoges[1], P. Bergeron[1], S. Lépine[2]

[1]*Département de Physique, Université de Montréal, Montréal, Québec, Canada*
[2]*Department of Astrophysics, Division of Physical Sciences, American Museum of Natural History, New York, NY, USA*

The aim of our project is to create a catalog of white dwarfs within 40 parsecs of the Sun, in which newly discovered objects would significantly increase the completeness of the current census. White dwarf candidates are identified from the SUPERBLINK proper motion database (Lepine & Shara 2005), which allows us to investigate stars down to a proper motion limit as low as 40 mas yr^{-1}. The selection criteria and distance estimates are based on a combination of color-magnitude and reduced proper motion diagrams. Candidates with distances lower than 50 parsecs are selected for spectroscopic follow-up. We present our preliminary sample of spectroscopically confirmed white dwarfs. The atmospheric parameters for the DA, DB, DQ, and DZ stars are obtained from a combination of spectroscopic and photometric techniques.