Massive White Dwarfs from Nearby Young Clusters

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Extensive searches for WDs in open star clusters have left a dearth in the high mass region of the WD initial-final mass relation. In an attempt to address this issue we developed a technique to identify WDs that were born in and subsequently escaped from nearby young open clusters. We applied this technique to all of the clusters younger than 200 Myr and within 200 pc of the Sun. From this search we identified five candidate escaped WDs in the Alpha Persei cluster, as well as three escapee candidates and one new current member in the Pleiades. We obtained spectra for all eight WDs and were able to confirm that six are massive WDs sufficiently young to have originated in their respective clusters. The three in Alpha Persei, in particular, are each more massive than any WD previously associated with a cluster using Gaia astrometry, and possess some of the most massive progenitors.