

NEW RESULTS AND A LUMINOSITY FUNCTION FOR DO AND DB WHITE DWARFS

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As with many other classes of objects, the number of known DB and DO white dwarfs with good spectra has expanded by a large factor due to the Sloan Digital Sky Survey. Last year, Daniel Eisenstein and James Liebert with many coauthors reported the discovery of very hot DB / cool DO stars in the previously unpopulated 30,000-45,000 K T_{eff} range, the so-called “DB gap”. We review the implications of this for convective mixing of a subset of hot DA white dwarfs. We present a preliminary luminosity function of the hot non-DA white dwarfs. The discovery of hot DQ white dwarfs discussed here by P. Dufour may have implications for the mass distribution of the DB stars.