

# APPLICATION OF IMPROVED MODEL SPECTRA TO DA WHITE DWARFS IN THE SDSS

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We have recently published a new set of model spectra for DA white dwarfs with improved Stark broadening and obtained sound results for the mass distribution of hot DA stars identified in the PG sample. We apply here these improved model spectra to the large SDSS sample of DA white dwarfs that includes many stars cooler than 12,000 K where the problem of abnormally high surface gravities has been observed. We attempt to determine the best compromise between the size of our selected sample and the signal-to-noise ratio of the optical spectra. We present improvements made in our understanding of the general properties of the sample, such as the mass distribution as a function of effective temperature, and compare the results to other large DA samples. We finally report on the detection of double degenerate binary systems.