

A SPECTROSCOPIC SURVEY OF BRIGHT DA WHITE DWARFS

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We have conducted a survey of bright ($V \leq 17.5$) hydrogen-line (DA) white dwarfs based largely on the last published version of the McCook & Sion catalog. Our sample consists of a total of 1334 high signal-to-noise ratio ($S/N > 50$) optical spectra, over 700 of which were obtained specifically during the course of this survey both in the northern and southern hemispheres. We combine the latest atmosphere models with our spectroscopic technique to accurately derive the atmospheric parameters, namely the effective temperature and surface gravity, for each star. In some cases, more detailed models are required whereas more involved fitting procedures are necessary to extract information from the composite spectra of DA+dM binary systems and double-degenerate systems. We present here the final results of our analysis. This includes an examination of the global properties of our sample, analyses of several unique objects and systems, as well as revisiting the ZZ Ceti instability strip and the determination of its empirical boundaries.