

DAHe STARS HAVE ACTIVE CHROMOSPHERES

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Despite thousands of spectroscopically-identified white dwarfs, two years ago only one isolated and cool star was known to exhibit Balmer emission. Six such systems are now known, suggesting a new class of chromospherically-active white dwarfs. Furthermore, their close grouping on the HR diagram points to a single star evolutionary origin, but with an unknown source of chromospheric heating. The common characteristics of the class are important pieces of the puzzle and include apparent isolation, fast rotation, and magnetism. In this talk, we report photometric, spectroscopic, and spectropolarimetric observations of the class prototype, GD 356, where the data point to a temperature inversion similar to that seen in the Sun and cool dwarf stars. Despite the unknown physics, there are several testable predictions if the emission has an intrinsic origin. Further observations are crucial to constrain any evolution-activated chromospheric phenomena, with implications for not only this whole class of stellar remnants, but for magnetic stars in general.