PLACING KEPLER MAGNITUDES ON AN ABSOLUTE PHOTOMETRIC SCALE

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We propose to observe a set of white dwarfs within the Kepler field. These observations can be used to derive the absolute calibration of Kepler fluxes and to relate Kepler magnitudes to observed stellar magnitudes in other common astronomical photometric systems. A second objective is to investigate the photometric stability of white dwarfs, at several orders of magnitude below what is now practical. There are very good theoretical reasons to expect most white dwarf photospheres to be homogeneous over the surface of the star and to be invariant over all observable time scales.