White Dwarf – Red Dwarf Systems Resolved with the *Hubble Space Telescope*

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We present results for a *Hubble Space Telescope* Advanced Camera for Surveys high-resolution imaging campaign of 90 white dwarfs with known or suspected low mass stellar and substellar companions. Of the 72 targets which remain candidate and confirmed white dwarfs with near-infrared excess, 43 are spatially resolved into two or more components, and a total of 12 systems are potentially triples. For 68 systems where a comparison is possible, 50% have significant photometric distance mismatches between their white dwarf and M dwarf components, suggesting white dwarf parameters derived spectroscopically are often biased due to the cool companion. Interestingly, nine of 30 binaries known to have emission lines are foundto be visual pairs and hence widely separated, indicating an intrinsically active cool star and not irradiation from the white dwarf. There is a possible, slight deficit of earlier spectral types (bluer colors) among the spatially unresolved companions, exactly the opposite of expectations if significant mass is transferred to the companion during the common envelope phase. Using the best available distance estimates, the low mass companions to white dwarfs exhibit a bimodal distribution in projected separation. This result supports the hypothesis that during the giant phases of the white dwarf progenitor, any unevolved companions either migrate inward to short periods of hours to days, or outward to periods of hundreds to thousands of years. No intermediate projected separations of a few to several AU are found among these pairs. However, a few double M dwarfs (within triples) are spatially resolved in this range, empirically demonstrating that such separations were readily detectable among the binaries with white dwarfs. A straightforward and testable prediction emerges: all spatially unresolved, low mass stellar and substellar companions to white dwarfs should be in short period orbits. This result has implications for substellar companion and planetary orbital evolution during the post-main sequence lifetime of their stellar hosts.