The precataclysmic binaries and magnetic fields of the cataclysmic variables

N.F. Vojkhanskaya

Special Astrophysical Observatory of the Russian AS, Nizhnij Arkhyz 369167, Russia

Abstract. The attempts to reveal magnetic field in white dwarfs of cataclysmic variables (except polars) have so far yielded no positive result. The problem is complicated by the fact that the luminosity of accretion sources of radiation is well higher than the proper luminosity of the system components. To avoid this difficulty, it is proposed to apply to precataclysmic binaries. The first polarization measurement results which point to the absence of noticeable magnetic fields in white dwarfs of precataclysmic binaries are reported. The properties of single white dwarfs and binary system members are compared. It has been inferred that the magnetic field has no effect on the evolution of single stars, while in binary systems its influence shows up through the effect on the orbit evolution.