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Kinematics of RS CVn and W UMa Binaries in the Hipparcos Catalogue

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Abstract: Space motions of RS CVn and W UMa binaries have been calculated using parallaxes and proper motions from Hipparcos catalogue and radial velocities from the literature. We have calculating the mean motions and velocity dispersions. We have excluded those binaries with relative parallax errors ≥ 0.5 . The comparison of the asymmetric drift, velocity ellipsoids and vertex deviation with those of main sequence stars given by Dehnen and Binney indicates that both RS CVn and W UMa binaries have kinematics similar to main sequence stars slightly bluer than the Parenago's discontinuity and $B-V \leq 0.62$. Implication of this has been discussed.

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