

A SEARCH FOR RR LYRAES IN WIDE BINARY SYSTEMS

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Abstract. RR Lyraes that have nearby visual companions may be examined to decide if they do indeed belong to a real binary system. Identification of RR Lyraes in binary systems could lead to the determination of physical characteristics of the variable and to an understanding of the history and evolution of such systems in the Galaxy. Where possible, proper motion analysis, using astrograph plates from the Lick Proper Motion Program, for some visual binaries has been done and has enabled the rejection of some variables from consideration. The variables which have been shown not to be physically associated with their visual companions are YZ Cap, V445 Oph, BH Peg, and TX Vir. EZ Lyr, RW Ari, and V494 Sco still remain possible cases requiring relative radial velocities between the variable and companion. Limited plate material has meant that one must resort to radial velocity measurements for the RR Lyrae and close companion in order to determine the nature of the pair.

Partial funding to attend this meeting was received from NSF grant no. AST 84-14142. (to B. Jones) and from the University of California.