PECULIARITIES IN SOME CLUSTER COLOR-MAGNITUDE DIAGRAMS

Bernard J. McNamara and W. L. Sanders
New Mexico State University

There has existed for some years a generally accepted conceptual scheme of stellar evolution as reflected in HR diagrams. Such evolutionary sequences are normally only apparent in stellar clustering where, in the first order at least, coeval formation is assumed. Such observational evidence of evolutionary sequences is directly dependent upon the identification of cluster membership. Only in very recent years have the necessary high precision and full membership based independently upon proper motion become available for a significant sample of clusters. The result of these studies for some sample cluster C-M diagrams are discussed and some possible difficulties with our evolutionary scheme are evidenced.