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Spectroscopic Relation between Open Cluster and Globular Cluster

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Abstract : The curiosity to investigate the space and its mysteries was dependably the main impetus of human interest, as the particle of livings exists from the "debut de l'Univers" (beginning of the Universe) typified with its few other living things. The sharp drive to uncover the secrets of stars and their unusual deportment was dependably an ignitor of stars investigation. As humankind lives in civilizations and states, stars likewise live in provinces named ‘clusters’. Clusters are separates into 2 composes i.e. open clusters and globular clusters. An open cluster is a gathering of thousand stars that were moulded from a comparable goliath sub-nuclear cloud and for the most part; contain Propulsion I (extremely metal-rich) and Propulsion II (mild metal-rich), where globular clusters are around gathering of more than thirty thousand stars that circles a galactic focus and basically contain Propulsion III (to a great degree metal-poor) stars. Futurology of this paper lies in the spectroscopic investigation of globular clusters like M92 and NGC419 and open clusters like M34 and IC2391 in different color bands by using software like VIREO virtual observatory, Aladin, CMUNIWIN, and MS-Excel. Assessing the outcome Hertzsprung-Russel (HR) diagram with exemplary cosmological models like Einstein model, De Sitter and Planck survey demonstrate for a superior age estimation of respective clusters. Colour-Magnitude Diagram of these clusters was obtained by photometric analysis in g and r bands which further transformed into BV bands which will unravel the idea of stars exhibit in the individual clusters.

Keywords : color magnitude diagram, globular clusters, open clusters, Einstein model
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