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STELLAR VARIABILITIES IN MASS TRANSFER OF BINARY STAR SYSTEM

Abstract

Most of the stars which we observe belong to binary star system. A system of star companion with another star with relatively suitable mass is called binary star system. Usually, if stars represent as a binary system, they should comprise of nearly half of solar mass or else they gets destabilized. The discovery of binary system RXJ0529.4+0041 which is a young and low mass binary stellar system. As it was associating with Orion, which has been found rich in Lithium (Li) content. In that approach the binary eclipsing observation which gave the values of H, J, K and data has been analysed with K2V and K7V stars along with H, Li 1 graph lines. This research work is based on getting a relation between the mass, temperature and radiation and its variation with gravitational field between the stars in a binary system during the stellar mass transfer (MT). The relation in this study will determine whether the particle kinetic energy is equal to the kinetic energy of the stellar bodies during the mass transfer. The radiation and heat released into the outer space during this process will possibly impact nearest celestial bodies . These bodies will get impacted by the increase in temperature and the gravitational effect from the mass exchange will disturb it's position in stellar space.