

The Effect Of Gravitational Disturbance By Stars On Disc Of Protostar

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In birth of stars, they belong to a cluster. Some are the weakly binding binary, which collapse binary system later. Possibly, others experienced the stellar encounter. It is important that the stellar encounter affect the formation of Solar system. We study the stellar encounter of protostar with planetesimal disc. We have computed 10000-body test particles encountering a star or binary stars. We have a following result. If test particle's semimajor axis, a , is smaller than $q/3$, where q is pericenter distance of encounter, the eccentricity is on population to a/q power of $5/2$, the inclination to a/q power of $3/2$. Else, this encounter caused the great orbital evolution test particle.