

Abstract Submitted
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Analysis of relaxation time from numerical simulation of open star clusters SHELBY LEE, CAVENDISH MCKAY, ANN BRAGG, Marietta College — Open clusters exhibit mass segregation such that higher mass stars are more centrally concentrated than lower mass stars. Untangling the effects of primordial distribution and dynamical evolution has proven challenging, as observers only see any given cluster at a single moment in time. We use numerical simulations to study the time evolution of ensembles star clusters drawn from initial distributions consistent with the Plummer model and the Salpeter initial mass function. We discuss the time dependence of mass segregation for clusters of various sizes.

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