

Abstract Submitted
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Simulations of Open Star Cluster Evolution YANG JING, ANN BRAGG, Marietta College — In this project, we simulate the evolution of open star clusters in order to study how their initial conditions affect their relaxation times. Our simulations were generated using modules from starlab, a free online software package designed to simulate the evolution of dense stellar systems and to analyze the resultant data. By measuring the evolution of the spatial distributions of stars of different masses, we can study how the initial conditions of an open star cluster affect its evolution. We will present results for clusters containing 1500 stars and we will compare clusters containing binary stars to those without. We will also compare clusters with various initial mass functions.

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