Abstract Submitted for the OSS05 Meeting of The American Physical Society

Gravitational N-body Simulation of Galactic Clusters ERICA BLASDEL, STEPHEN ALEXANDER, Miami University of Ohio — We have extended a gravitational N-body simulation code that has been used for solar system studies to the scale of stellar clusters. We have used this code to simulate the dynamics of open or galactic stellar clusters that are characterized by a few hundred newly formed stars embedded in the gas and dust cloud from which they formed. We report on the results of simulations that study the stability of the cluster as the remnant cloud is dispersed over the time-scale of a few million years.

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Date submitted: 08 Apr 2005

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