

Abstract Submitted
for the MAR10 Meeting of
The American Physical Society

Escape from the 3 Body Problem MARGARET RAABE, JOHN F. LINDNER, The College of Wooster, Wooster OH 44691 — Computing the minimum speed for a projectile to escape a solar system consisting only of a “star” and a “planet” is nontrivial and was controversial until just recently, when it was analyzed in the context of the *restricted* 3 body problem: if most of the system’s mass is in the star, the projectile should be shot slightly outward of the planet’s motion, but if most of the system’s mass is in the planet, the projectile should be shot toward the star for a gravity assist. Here, we analyze the escape problem in the context of the *full* 3 body problem, allowing the projectile to perturb the star and the planet, using cluster computing techniques. This work was supported in part by NSF DMR-0649112.

John Lindner
The College of Wooster, Wooster OH 44691

Date submitted: 18 Dec 2009

Electronic form version 1.4