

Figure 1. from Modeling Dense Star Clusters in the Milky Way and beyond with the Cluster Monte Carlo Code

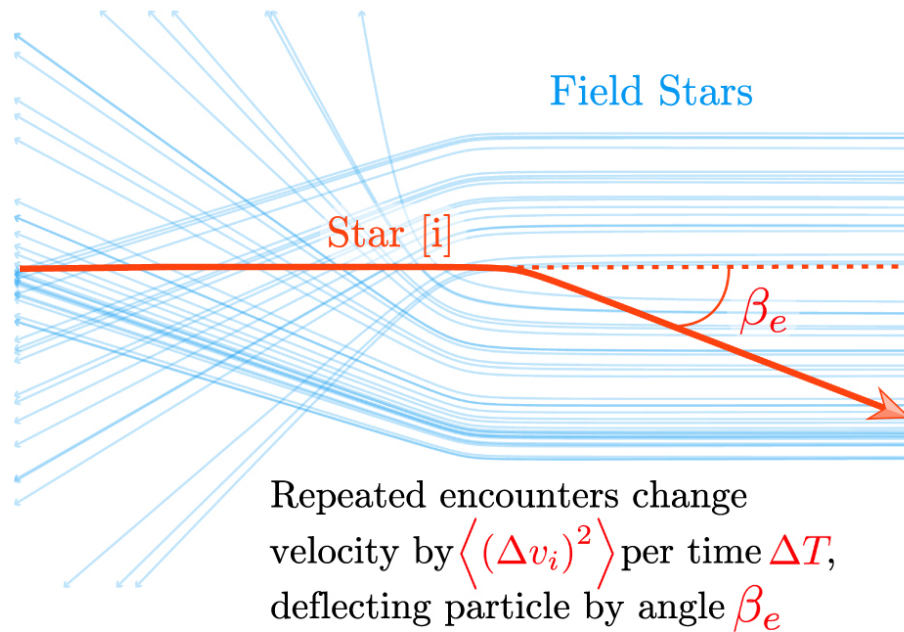
null 2022 APJS 258 22 doi:10.3847/1538-4365/ac2edf

<https://dx.doi.org/10.3847/1538-4365/ac2edf>

© 2022. The Author(s). Published by the American Astronomical Society.

MANY TWO-BODY ENCOUNTERS

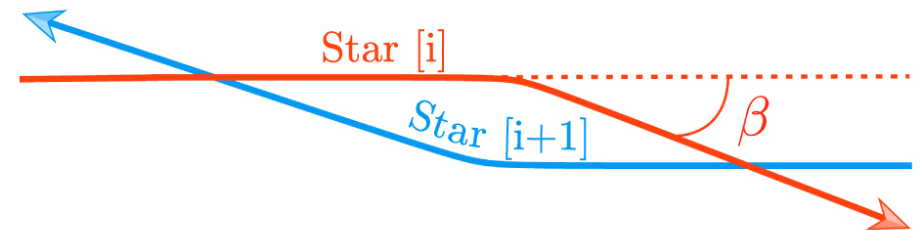
N-Body Method



EFFECTIVE TWO-BODY RELAXATION

Hénon's Method

Perform "effective" scatterings between nearest neighbors, setting $\beta \equiv \beta_e$



Reproduces statistics of many two-body encounters, changing particle's velocity by $(\Delta v_i)^2 \propto \sin^2 (\beta/2)$ every timestep ΔT