

Modeling YoDeCs with a Gadget/Kira hybrid

Michael Sipior Simon Portegies Zwart Alessia Gualandris

GDTkira

Expensive, high-precision results where it matters

Allows us to exceed GRAPE memory limitations

MPI-capable version allows an entire cluster to deal with Gadget domain

YoDeCs in the Galactic nucleus

Clusters like the Arches, Quintuplet

Galaxy nucleus consists of 2.8×10^5 particles, with 10^4 particle cluster (after Kim & Morris 2003)

Constrain limits of dynamical friction in dragging clusters over ~ 10 Myr timescales