

R48a Massive black holes in star clusters

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We report results of N-body simulations done on GRAPE6 aimed at studying the dynamical evolution of the galactic globular cluster M15 and the cluster G1 in M31. In both clusters, recent HST observations have shown that the central velocity dispersion cannot be fitted by kinematical models in which the cluster mass follows its light distribution, leading to the possibility that they harbor intermediate-mass central black holes. In our N-body simulations we study whether dynamical models without massive central black holes can explain the observations.