

PHYSICS AND ASTRONOMY SEMINAR

Dr. Bill Harris

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"Galaxy Halos and Globular Cluster System Formation"

Abstract

An increasing body of data is revealing an excellent and surprising one-to-one correlation between the total halo mass of a galaxy and the total mass in all its globular clusters. This relation applies over 5 orders of magnitude in galaxy size, is virtually independent of galaxy type, and has an intrinsic scatter that may be as small as +0.2 dex.

In addition, the blue (metal-poor) and red (metal-rich) GC subpopulations behave in interestingly different ways with galaxy mass, and the specific way in which the red/blue numbers change with galaxy mass may give us a valuable new constraint on hierarchical merger models. I will discuss what all of this might mean for understanding GC and galaxy formation.

Friday, February 6, 2015 1:30 p.m. Elliott Building Room 062