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Planes in Illustris and Elvis

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ABSTRACT

Key words: Local Group — galaxies: dwarf – galaxies: individual (M31)

1 INTRODUCTION

Observational evidence of planes is everywhere (where we can see them). MW, M31, Centaurus A.

Not so evident in simulations:

Millenium II Baumgardt, Ibata, Pawlowski

Clues Gillet est pero diferente

Plane claims:
Libeskind: preferential direction for accretion.
Sawala: planes are there when baryonic physics is included.
Buck: planes are easy to form at early times, when DM filaments are very thin. In high redshift galaxies galaxies, planes are everywhere.

Other explanations: Kroupa: tidal dwarfs
Fouquet

Following a bit on the claim by Sawala that barionic physics are important when looking for planes, WE look in Illustris and Elvis simulations to try and understand why barionic physics results in planar distribution of satellites.

This paper is organised as follows.

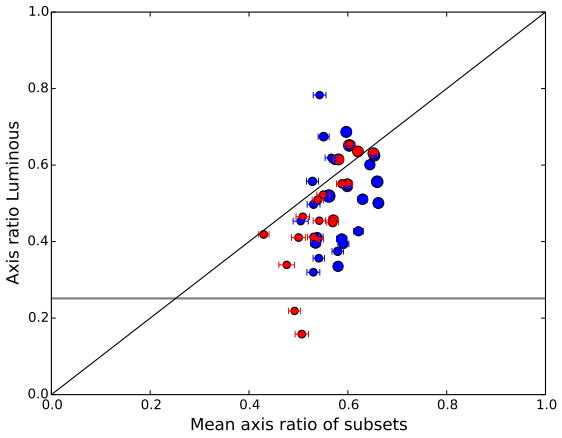

Figure 1. .

2 METHOD

3 RESULTS

4 DISCUSSION

5 ACKNOWLEDGEMENTS

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