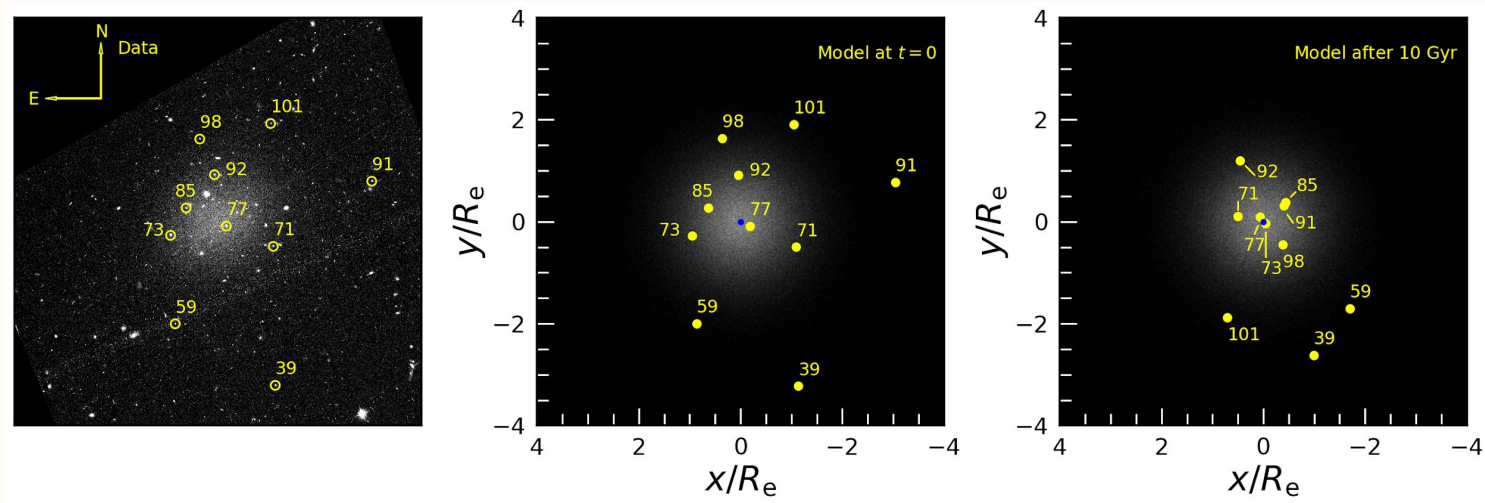


# On the Orbital Decay of Globular Clusters in NGC 1052-DF2: Testing a Baryon-Only Mass Model

Dhruba Dutta Chowdhury (Department of Astronomy, Yale University)

Collaborators: Frank C. van den Bosch, Pieter van Dokkum



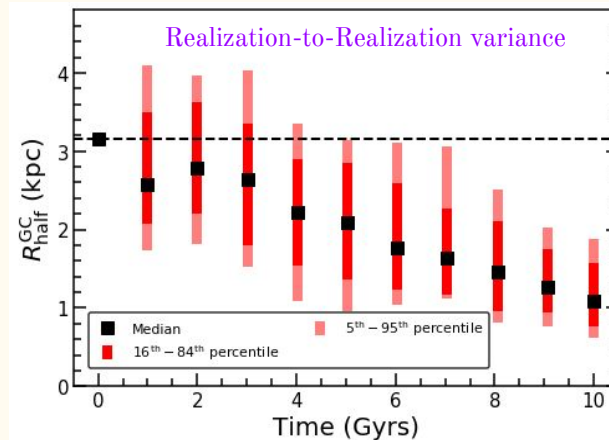
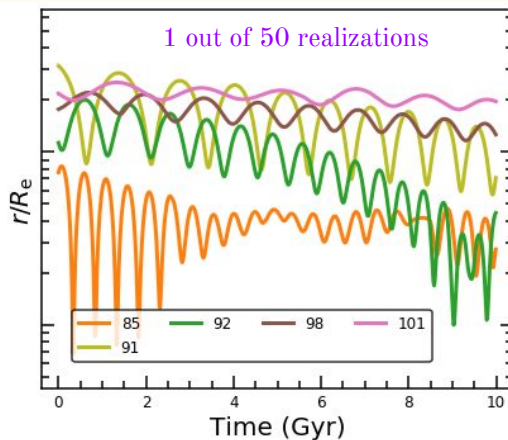
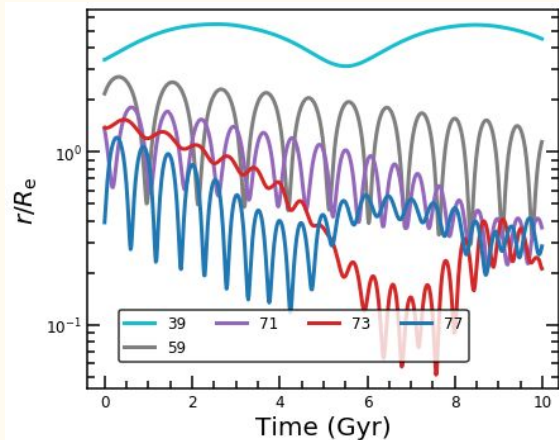
Are the dynamics of the GCs in NGC 1052-DF2 consistent with a baryon-only mass model ?

[Dutta Chowdhury et al. \(2019\)](#)

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## Summary

- Orbital decay due to dynamical friction  $\longrightarrow$  GC system becomes more compact over time
- Core-stalling and GC-GC scattering prevent the GCs from sinking all the way to the galaxy center
- Baryon-only mass model perfectly viable as long as the GC system was more extended in the past