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Galaxy Evolution Through Tidal Interactions: Evolution of the Observed and Mass Derived Rotation Curves of M31 and the Milky Way

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ABSTRACT

How does the "observed" and mass-derived rotation curve of each galaxy evolve (disk, bulge)? ("Observed" meaning plot the simulated disk particle line of sight velocity field edge on; See Lab 7).

1. INTRODUCTION

Define your proposed topic and how it pertains to Galaxy Evolution. You should describe this general area of galaxy dynamics and evolution.

State why this topic matters to our understanding of galaxy evolution.

Overview our current understanding of the topic in galaxy evolution, broadly.

What are the open questions related to this topic?

Include a figure to support one of the above paragraphs. Need to cite at least 3 papers in the above paragraphs.

2. PROPOSAL

2.1. *Proposal*

What specific question(s) will you be addressing using the simulation? You only need to pick one - think about how much time you have realistically!

2.2. *Methods*

How will you approach the specific question using the simulation data? Define all relevant equations and terms. Here you should outline the codes you'd need to write - each question will need a unique code solution. This can be described in general terms but all steps need to be outlined (including what particly types/properties will you select and how you will select them, specify which snapshots will you use).

Must include at least one figure that illustrates the methodology.

2.3. *Hypothesis*

What is your hypothesis for what you will find? Why do you thik this will occur?