Grading Rubric : ASTR400B Research Assignment 2

Name: [Klindt,Kris](https://github.com/KrisKlindt/ASTR400B)

**A Introduction 10/ 10**

Each of the below points should be a separate paragraph in your introduction.

1. Define the Proposed Topic. /1
2. State why this topic matters to our understanding of galaxy evolution. /2
3. Overview our current understanding of the topic. /2
4. What are the open questions in the field? /2
5. Cite at least 3 journal papers. Use BibTex for formatting citations /1
6. Include at least one figure with caption from those papers to motivate your work. /2

**B. The Proposal 8 / 10**

They must answer each of the below questions as separate subsections.

1. What specific question(s) will you be addressing? /1
2. How will you approach the problem using the simulation data? Here you should outline the codes you’d need to write. It can be in general terms. 3/5
3. Include at least one figure that illustrates your methodology. /2
4. What is your hypothesis of what you will find? Why do you think this will occur? /2

**C. Misc. 5 /5**

1. Proper Grammar /1
2. Included a bibliography /1
3. In Latex and ApJ/MNRAS formatting /2
4. On Time/On Github /1

**TOTAL** 23**/25**

**Late Penalty:**

* if submitted on due date, but after 5 PM  **(-5 points).**
* Proposals will **not be accepted** after the due date.

**Comments: -2:**

**how will you make the video ?**

**Alternatively, you can show the evolution of the rotation curve at multiple snapshots by overplotting the line in one plot. you could compute the rotation curve by computing the v\_\phi in cylindrical coordinates as a function of radius - since that will show you how the stars are actually rotating, vs the red line you have plotted now , which is derived from the mass profile.**

**Up to what radius will you consider the M33 particles - e.g. within the Jacobi Radius?**

**It might be better to pick a few points in the simulation - like at closest approaches (pericenter) and apocenters (farthest approaches) rather than doing this at all snapshots. That way you can directly related changes in the kinematics of M33’s disk to the orbit.**

**Figure 2 : be clear that this is for M31. You need to make this plot for M33.**