Grading Rubric : ASTR400B Research Assignment 2

Name: [Lagnado,Matan Jacob](https://github.com/mlagnado/ASTR400BHomework)

**A Introduction 10 / 10**

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

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

**B. The Proposal 9/ 10**

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

1. What specific question(s) will you be addressing? 1/1
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. 4/5
3. Include at least one figure that illustrates your methodology. 2/2
4. What is your hypothesis of what you will find? Why do you think this will occur? 2/2

**C. Misc. 3.5/5**

1. Proper Grammar 0.5/1
2. Included a bibliography 1/1
3. In Latex and ApJ/MNRAS formatting 1/2
4. On Time/On Github 1/1

**TOTAL** 22.5**/25**

**Late Penalty:**

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

**Comments:**

**Methods -1:**

**within what radius will you compute the velocity dispersion and why? Talk to us. You could compute the velocity dispersion profile, where you measure the velocity dispersion in spherical shells as a function of radius. but you still need to decide at what radius to stop the calculation. You could e.g. pick the Jacobi Radius or decide to look only at the inner stellar disk as defined based on the stellar disk profile in the initial snapshot.**

**For your project you only have to consider the galaxies during the interaction phase, not the merger itself. But if you do want to consider the mergers, remember that When the galaxies merge, you would have to consider stars from both MW and M31 together and explain the methodology of how to do this.**

**Make sure to relate changes in the velocity dispersion to the orbit - e.g. before during and after their first passage.**

**-1.5: grammatical and latex accuracy.**