

Research Assignment 1 Proposal

Charlotte Kevis

February 2020

1 Stars At the Sun's Radius in M33 and M31

- If the star were to move at the same circular velocity as the Sun, what would happen to them in the M31 system? What would happen in the M33 system?
- What will happen to these stars when M31 merges with the Milky Way? Specifically, what will happen to the stars in M33 when the two larger galaxies merge?
- What is the mass contained within the orbit of these stars for each galaxy as compared to the Milky Way? How does this impact the movement of the stars?