

ASTR 400B Research Assignment Topics

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I listed the topics in the order of preference.

1. MW/M31 Galaxy Major Merger Remnant

- (a) How well is the remnant described as a classical elliptical galaxy based on its surface density profile? What is the best fit sersic profile?

2. Galaxy Merger Sequence of MW and/or M31

- (a) 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).