Research Proposal: Structure and Evolution of Tidal Bridges and Tails in the MW-M31 Collision

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Research Project Topic

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Research Questions

This study aims to investigate the structure and long-term evolution of tidal bridges and tails formed during the MW-M31 collision. The specific research questions are:

- What density gradients and spatial structures characterize the tidal bridges and tails?
- How asymmetric are the tidal tails and bridges, and what factors contribute to this asymmetry?
- How long do these structures survive within the post-merger remnant?
- Do tidal tails or bridges contribute to the formation of satellite systems or stellar streams from M33?
- Can the properties of these structures retain information about the initial collision dynamics?