## Research Proposal

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## 1 Introduction

Tidal Transformation of Satellites: Evolution of the internal stellar structure and dynamics of M33 and mass loss rate. As the two galaxies merge with each other, we plan to research and see how stellar evolution and mass losses of stars located in M33 changes after the collision.

While we understand how stellar evolution, structure, and dynamics work it becomes tricky under extreme circumstances. One circumstance is galaxy merger. More specifically, we see more of the "rare" cases when it comes to stellar dynamics. This also helps us understand how the density of the galaxy changes as well as the evolution of the galaxy as a whole.

## 2. Specific research question:

Stars: Evolution of the internal stellar structure and dynamics of M33 and mass loss rate