

MEASURING THE MILKY WAY

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1. Abstract

The size and shape from distribution of variable stars
age from the number distribution of variable stars

2. Description of the Proposed Program

A) *Scientific Rationale:*

- Use gri data to identify variable stars
- Use Period-Luminosity relationship to get distance
- Map 3D spatial distribution
- Determine deviation of variable stars from model
- Variations arise from non-gravitational effects
- Figure out dark matter distribution

B) *Immediate Objective:*

Measure the size, shape, and age of Milky Way spiral arms.

3. Scientific Justification of Requested Observing Time, Feasibility, and Visibility

4. Technical Justification of Duplication

5. Report on Previous Swift and Related Programs

6. References

Author1 A. et al., YYYY, Journal, Vol., page

7. Budget Narrative

Figure 1: *Left panel:* here you see... *Right panel:* here you see...