

# Transient Mapping

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- Figure out dark matter distribution

## 3D MAP GALAXY - VAR. STARS

- 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

## PAN-STARRS COMPARISON

- download Pan-STARRS data (running)
- compare generated variable star list to PS RA and Dec
- validate observed variable stars

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<sup>†</sup> Observational Astronomy 301