Transient Mapping

Daichi Hiramatsu[1] and Corey Mutnik[1, *]

[1]*Department of Physics & Astronomy,*
University of Hawaii at Manoa,
2505 Correa Rd, Honolulu, HI, 96822, USA[†]

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

- Figure out dark matter distribution

PAN-STARRS COMPARISON

- download Pan-STARRS data (running)

- compare generated variable star list to PS RA and Dec

- validate observed variable stars

CONFIRM ACCELERATED EXPANSION - SUPER NOVEA

- use PanStarrs data to identify supernova locations

---

[*] dhiramat@hawaii.edu; cmutnik@hawaii.edu
[†] Observational Astronomy 301