

# Astrophysics Seminar

Monday, December 4, 2017

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## *Spiral Structure of the Milky Way and Other Galaxies*

Abstract The BeSSeL Survey is providing parallax measurements for high-mass star forming regions. There are now about 200 parallaxes, which accurately trace the spiral structure in the first, second and third quadrants of the Milky Way. We have developed a Bayesian approach to leverage these results to estimate distances to large numbers of sources from surveys based only on Galactic coordinates and velocities. Using this program we can make a more realistic visualization of the Milky Way's spiral structure. We also estimate the distance to the Galactic Center, the circular rotation speed at the Sun, and explore the nature of the rotation curve.

3:30pm in CAS 502. Refreshments served at 3:15pm in CAS 500.

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Next Week  
Jason S. Kalirai  
STScI