Contribution ID: **71** Type: **not specified**

Measuring anisotropy in the local universe with type Ia supernovae

Wednesday 1 June 2016 15:40 (20 minutes)

Summary

Our Local Group of galaxies appears to be moving relative to the Cosmic Microwave Background with the source of the peculiar motion still not fully identified. While this has been studied mostly using galaxies in the past, the weight of SNe Ia has increased recently with the continuously improving statistics of available low-redshift supernovae. An analysis of the peculiar velocities of 117 supernovae out to $z < 0.1$ from the Nearby Supernova Factory, as well as the world literature supernova data, found that the Shapley supercluster does not fully explain the observed velocities. This talk will give an overview of studies of peculiar velocities and local anisotropy based on type Ia supernovae and show first predictions for further analyses using future supernova surveys such as the Zwicky Transient Facility.

Presenter: FEINDT, Ulrich (Stockholm Univ.)

Session Classification: Astro + Cosmo I-II