

Meeting: AAS Division for Planetary Sciences (DPS) meeting
Location: Reno, Nevada
Dates: Oct. 15-19, 2012

Title: "The Size Frequency Distribution of Small Main-belt Asteroids"

Presenter: Karl R. Stapelfeldt

Abstract:

The asteroid size distribution informs us about the formation and composition of the Solar System. We build on our previous work in which we harvest serendipitously observed data of the Taurus region and measure the brightness and size distributions of Main-belt asteroids. This is accomplished with the highly sensitive MIPS 24 micron channel. We expect to catalog 104 asteroids, giving us a statistically significant data set. Results from this investigation will allow us to characterize the total population of small, Main-belt asteroids. Here we will present new results on the completeness of our study; on the presence of size distribution variations with inclination and radial distance in the belt; and early result on other archival fields.