Contribution ID: **10** Type: **not specified**

The Physics of Polarized Dust Emission Brandon Hensley (JPL)

Friday 11 December 2015 09:50 (25 minutes)

A population of aligned, aspherical grains will emit linearly polarized radiation from infrared to microwave wavelengths. I will review the physics of dust polarization, focusing on the factors that determine the level and frequency dependence of the infrared and microwave emission, such as magnetic field geometry, depolarization, and the relative contribution of various grain materials to the total emission. Particular emphasis will be given to uncertainties in current dust models and the adequacy of simple parametric fits to the polarized dust SED.

Presenter: Dr HENSLEY, Brandon (Princeton/JPL)

Session Classification: Foreground