Polarization Extinction / Emission

B.-G. Andersson*[1]

[1]McDonald Observatory, University of Texas at Austin – United States

Abstract

Dust-induced polarization has tradiationally been used primarily to trace interstellar magnetic fields. It still can, but with the development and testing of modern Radiative Alignment Torque (RAT) theory, polarimetry - from the UV to mm-waves - also provide a powerful way to probe the dust, its size, including growth and destruction, shape, and mineralogy, as well as its environment, including gas density and radiation fields. I will briefly review the elementa of RAT alignment and illustrate, with multi-wavelength observations how we can use (spectro-)polarimetry to gain new and unique insights about interstellar dust and teh interstellar medium.

*Speaker