

# **A Unified Model of the Emission, Extinction, and Polarization of Interstellar Dust**

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We present a new model of interstellar dust composed of silicates, graphitic carbonaceous grains, and polycyclic aromatic hydrocarbons that reproduces the wavelength dependence of dust extinction (total and polarized) and emission (total and polarized) in the diffuse interstellar medium from UV to microwave wavelengths. In this talk, I will focus on 1) the development of a new model of spinning dust emission based on ultrasmall silicates, including its polarization properties and 2) the extension of the silicate+graphite+PAH model to polarization through use of spheroidal grains and guided by observations of polarized dust emission by the *Planck* satellite.