Conference: Extreme Solar Systems II
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Title: "Probing Nearby Planetary Systems by Debris Disk Imaging"
Presenter: Karl R. Stapelfeldt

Abstract:

Many main-sequence stars possess tenuous circumstellar dust clouds believed to trace extrasolar analogs of the Sun's asteroid and Kuiper Belts. While most of these "debris disks" are known only from far-infrared photometry, a growing number of them are now spatially resolved. In this contribution, I review recent imaging results on debris disk structures from the Hubble, Spitzer, and Herschel Space Telescopes. Specific cases of disk interactions with imaged and radial velocity exoplanets will be discussed. I will show how combined modeling of the optical and infrared datasets can place strong constraints on dust particle properties in the disks. Future developments in debris disk imaging will be discussed.