

Debris disks: What dust tells us about extrasolar comets and asteroids

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Debris disks are dusty belts of comets and asteroids found around a sizeable fraction of main-sequence stars of all spectral types and ages. Of course, the comets and asteroids in alien systems are not visible directly, yet debris disks are observed by the emission of dust that these small bodies release through mutual collisions and sublimation. Interpreting the dust emission with the assist of collisional and dynamical models, one can infer various properties of extrasolar comets populating Kuiper-belt analogs around other stars. I will discuss current constraints on the location, masses, sizes, dynamical excitation, and chemical composition of comets, and even on possible scenarios of their formation. Finally, I will review the status of searches for extrasolar asteroid belts in the inner regions of planetary systems.