

Conference: Signposts of Planets

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Presentation Title: "A new offset debris ring around a nearby star observed with the HST/STIS coronagraph"

Poster or Paper: Poster

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Abstract: We are conducting an HST/STIS coronagraphic imaging study of nearby stars that have Spitzer-measured infrared excesses indicating that they are surrounded by debris disks. Around one of the stars we have imaged a debris ring with a sharp inner edge and extending from about 165 AU to 250 AU. The ring center is offset from the star by  $\sim 8$  AU with a visually estimated intrinsic ellipticity of  $e \sim 0.1$ , suggestive of gravitational perturbation of the disk by a planet, like the Fomalhaut disk. Assuming a neutral disk color, the mean surface brightness of  $V=22.3$  mag/square arcsec makes this the second faintest disk yet imaged in scattered light, second to HD 207129.