HST/ACS Coronagraphic Images of a Debris Disk Around HD 92945. J. Krist¹, D. Golimowski², K. Stapelfeldt¹, D. Ardila³, M. Clampin⁴, C. Chen⁵, M. Werner¹, H. Ford², G. Illingworth⁶, G. Schneider⁷, M. Silverstone⁷, and D. Hines⁸, ¹Jet Propulsion Laboratory, ²Johns Hopkins University, ³Spitzer Science Center, ⁴NASA/Goddard Space Flight Center, ⁵National Optical Astronomy Observatory, ⁶University of California Lick Observatory, ⁷University of Arizona Stewart Observatory, ⁸Space Science Institute.

As part of the Advanced Camera for Surveys (ACS) Science Team program, selected stars with significant infrared excesses as measured by IRAS and Spitzer have been observed with the ACS coronagraph on the Hubble Space Telescope in order to detect potential circumstellar disks. A faint debris disk surrounding the nearby (22 pc) K1V star HD 92945 has been imaged in visible light. The disk appears inclined by about 70 degrees from pole-on and is seen extending to a maximum detectable radius of 5.5 arcseconds (122 AU). PSF subtraction residuals prevent reliable detection of the disk within 3 arcseconds (66 AU) of the star. The visible region appears featureless, with a mean surface brightness of V=22.6 mag/arcsec² and a radial brightness falloff of roughly r^{-2} between 3"-5". The disk is 30%-50% brighter in I band than V relative to the star.