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HIGH ANGULAR RESOLUTION IR IMAGING OF YOUNG STELLAR DISKS
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In recent years, the Hubble Space Telescope (HST) and groundbased adaptive optics (AO) systems have resolved the optical and near-infrared scattered light from nearly twenty young circumstellar disks, each of which have a radial size larger than the Kuiper Belt of our solar system. Around the youngest stars, researchers have discovered a small, but growing, number of disks oriented edge-on to our line of sight, occulting the direct light of the central star. When imaged at subarcsecond resolution, these edge-on disks offer unique insight into the vertical structure of young stellar disks. High resolution multiwavelength imaging of color gradients in protoplanetary disks when combined with accurate model density distributions hold the promise of constraining disk dust properties. Resolved infrared disk images also have revealed internal disk structures, some of which might plausibly arise from the dynamical influences of unseen substellar companions interior to the disks.A handful of disks have also been imaged in the mid-IR, resolving disk emission first detected photometrically by IRAS. Ultra-high resolution near-infrared interferometry of accretion disks has begun to place limits on structures within the innermost 1 AU of young accretion disks. I will review these recent studies and discuss future disk imaging techniques.