

Evolution of disk structure around the young intermediate-mass star based on the mid-infrared

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We have made 20 micron imaging observation studies of disks around young intermediate-mass star (Herbig Ae/Be stars) using Subaru/COMICS & GeminiS/T-ReCS, and showed that the spatially resolved disks have interesting structures such as gaps and inner holes (e.g. Fujiwara et al. 2006, Honda et al. 2010, Honda et al. 2012, Maaskant et al. submitted). These gaps and holes are also observed in other wavelengths, indicating that some disks show rapid dissipation of their inner region. On the other hand, there are disks without specific structures in them, which implies the diversity of the evolution of disk structure. We would like to discuss the possible scenario of the disk structure evolution based on the current observational studies.

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