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**A 3  $\mu\text{m}$  study of AFGL 2688**

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Owing to a superior image quality achieved by Subaru Telescope together with IRCS we obtained high resolution L'-band image of AFGL 2688 (Egg Nebula). This is the first image ever obtained in the thermal infrared regime with similar spatial resolution ( $\sim 0''.25$ ) as HST/NICMOS.

Bipolar reflection nebula previously observed in visible and shorter wavelength in the near infrared is a dominant structure at L'-band, too. The inner two arcsecond ( $< 2400$  AU) in the southern lobe (far side from observer) comes out to be very red in our two color (K-L) composite image. The inner red region well traces the centimeter wavelength emission previously reported by high resolution VLA observation. This strongly supports a heavy obscuring by dust grains distributed in the equatorial plane of the nebula.

L'-band image reveals a dark lane (scale height  $< 1000$  AU) at the waist of nebula that might possibly be a silhouette disk. The tilt of disk is position angle  $\sim 50^\circ$ , showing clear disagreement with bipolar axis which is at position angle  $\sim 15^\circ$ . This opens a question on fundamental structure of AFGL 2688. We discuss several alternative morphology models compared to the current standard model in which a equatorial disk is collimating outflow from central star to shape the bipolar structure of PPNe.

We also report spatially resolved spectroscopy in the 3  $\mu\text{m}$  region. The infrared emission feature at 3.2-3.6  $\mu\text{m}$  shows no significant spatial variation every where in the field of view. This implies the origin of the infrared emission feature is scattered light from the vicinity of the central source rather than emission. We conclude infrared emission feature emitting region is very compact, closely confined inside the disk totally obscured even in L-band.