

P103a **First Near-Infrared Imaging Polarimetry of Young Stellar Objects in the Circinus Molecular Cloud**

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Magnetic fields have been thought to play important roles in various stages of star formation. However, the precise role of the magnetic field is still poorly understood and observational evidence for its shape and structure has been limited in star forming regions. Infrared polarimetric observations are crucial for studying the physical processes in the interstellar medium and tracing the magnetic fields in dense star forming regions and circumstellar matter. In this presentation, we present the results of near-infrared linear imaging polarimetry in the  $J$ ,  $H$ , and  $K_s$  bands of the low-mass star cluster-forming region in the Circinus Molecular Cloud Complex. While most of the near-infrared polarizations of point-like sources are well aligned and can be explained by dichroic polarization produced by aligned interstellar dust grains in the cloud, 123 highly polarized sources have also been identified. The projected direction on the sky of the magnetic field in the Cir-MMS region is indicated by the mean polarization position angles ( $70^\circ$ ) of the point-like sources in the observed region, and the magnetic field direction is compared with orientations of the outflow associated with IRAS sources. We also show prominent polarization nebulosities over the Cir-MMS region for the first time.