

Dusty Disks in the Multiple Systems UZ Tau and GG Tau¹

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ABSTRACT

Interferometric observations of the 2.6 mm dust thermal emission around the T Tauri triple system UZ Tau show that most of it is equally divided between UZ Tau W (the close binary) and UZ Tau E. The emission is at least partially optically thick at 2.6 mm which implies an origin in disks of size ~ 13 AU and mass $\sim 0.024 M_{\odot}$. The 2.6 mm emission of the GG Tau system, a hierarchical quadruple, is partially resolved. Strong emission extended over $\sim 3'' \times 5''$ is associated with the close binary GG Tau. Weak emission is detected at GG Tau/c, also a close binary. Evidently extensive dusty disks can survive in the environment of close binaries for at least $\sim 10^5$ y, and their structure can vary markedly from system to system.

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