
The First High Resolution Interferometric Survey in K-band of High Mass YSOs

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Abstract

Circumstellar disks are crucial for high-mass star formation; however, our understanding of the geometry and physical properties of the innermost regions of disks around massive stars is limited due to their rarity, considerable distance and embedded nature. In this poster, I will present the first K-band high spectral and high spatial resolution study of a sample of High Mass Young Stellar Objects (HMYSOs), observed with VLTI/GRAVITY. We use geometrical modelling to derive the characteristic sizes of the K-band continuum and hot gas emission for this sample of HMYSOs. The sample populates the existing continuum emission size-luminosity diagram and is placed for the first time in the (Br γ) emission size-luminosity diagram. Their locations are directly compared to those of the Herbig AeBe stars. Additionally, we explore the origin of the hot gas emission (Br γ) by studying the displacements of its photocentre.

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