
LoTr5: a long-period binary central star with still many puzzling pieces

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Abstract

The central star of planetary nebula LoTr5 has recently become one of the longest orbital period binary central stars with the discovery of a companion at about 2700 days. The system, consisting on a rapidly rotating giant G star and a hot source responsible for the ionization of the bipolar nebula around it, still offers many open questions. One of them is the possibility of a third companion, close to the giant star. Besides, the spectra show a complex double-peak H α profile which varies with very short time scales. This could be mainly due to either chromospheric activity or the presence of an accretion disk. I will present our current knowledge of this interesting object based on different observations and how they help us to unveil the architecture of the system.

Keywords: planetary nebulae, central stars, binaries

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