

Título/Title:

Peering the details of two most massive binary systems in formation using ALMA and VLT

Orientador/Supervisor:

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Descrição/Description:

The most massive stars form rapidly via gravitational collapse of the densest and monstrous molecular clouds. The accretion flow making up the massive star is so dense and contains such large mass, the flow or the disk itself fragments (due to Jeans instability) leading to the formation of a second near-equal massive star. This phenomenon leads to the formation of massive binary stars. We have obtained observations of several molecular and ionising gas emission line observations of two massive binary systems in the formation using the Atacama Large Millimetre Array and adaptive optics assisted integral field spectroscopy using the Very Large Telescope. The student will work on analyzing and interpreting this thrilling data set.

Requisitos/Requirements:

While no previous experience is required, the expected output and/or progress will benefit with familiarity or expertise in working with astronomy softwares.