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Presentation Requested: poster

Category: Other

Question: Other

A multi-wavelength analysis of the star formation region RCW116b as a laboratory for high redshift studies

In this work we present a multi-wavelength analysis of the young stellar cluster associated with the infrared source IRAS 16571-4029 and his optical counterpart RCW116b.

Using data obtained with the VISTA telescope and the SHFI heterodyne receivers of the Atacama Pathfinder Experiment (APEX), we confirm the existence of multiple infrared sources inside RCW116b and a high number of YSOs candidates emebbed in the molecular complex, suggesting a possible scenario, where the molecular clouds could be fragmented due action of massive stellar objects , generating the massive sub-clusters observed tipically in these star formation regions.

The main goal of this work is to extend our knowledge about how the gas properties in the innermost parts of the molecular clouds, are related with the stellar population. This will help us to to create detailed scenarios that could explain how are the different star formation process in high redshift galaxies.