

Workshop

Stellar End Products: The Low Mass - High Mass Connection

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Homan, Ward

Title:

Analytical approach to embedded spiral geometries to interpret high-resolution data.

Abstract:

High-resolution observations have shown that stellar winds may harbour archimedean spiral morphologies (believed to be produced by binary interactions). We have developed an analytical description of the spiral, parametrised in terms of its geometry. To investigate the manifestation of this geometry in the observables we have conducted an extensive parameter study, focusing mainly on the CO rotational transition $J=3-2$. We have quantified the extent to which the spiral is recognisable in the spectral lines, and analysed the spatial emission by means of wide-slit position velocity diagrams.