

Workshop

Stellar End Products: The Low Mass - High Mass Connection

ESO Garching, 6-10 July, 2015

Uttenthaler, Stefan

Title:

Are the dust and gas mass-loss rates from Miras reduced by the third dredge-up?

Abstract:

We recently presented evidence that Miras that show the 3DUP indicator T_c in their atmosphere have a lower dust ML rate than Miras at comparable pulsation periods but without T_c . This suggests that the dust ML rate is reduced by the occurrence of 3DUP. In this talk we present further evidence in support of this finding. Most importantly, the available data of CO radio lines, although scarce for Miras without T_c , suggests that also the gas ML rate is reduced by the 3DUP. Possibly, this finding teaches us an important lesson about connections between 3DUP, pulsation and ML mechanism of AGB stars.