

Workshop

Stellar End Products: The Low Mass - High Mass Connection

ESO Garching, 6-10 July, 2015

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Title:

Complex organic and inorganic compounds in shells of Lithium-rich K giant stars

Abstract:

Hydrocarbon organic material, as found in the interstellar medium, exists in complex mixture of aromatic and aliphatic forms. It is considered to be originated from carbon enriched giant stars. We show here that the same organic compounds appear to be formed in previous stages of the evolution of giant stars. More specifically, during the first ascending giant branch K-type stars. According to our model this happens only when these stars are being abruptly enriched with lithium together with the formation of a circumstellar shell with a strong mass loss during just a few thousand years.