Flavia Dell'Agli, J Astrophys Aerospace Technol 2017, 5:3 (Suppl)
DOI: 10.4172/2329-6542-C1-011

Asymptotic giant branch stars: Dust manufacturers of their host environments

Flavia Dell'Agli
Instituto de Astrofísica de Canarias, Spain

During the evolution through the Asymptotic Giant Branch (AGB) phase, low-intermediate mass stars (≤8 Msun) play a fundamental role in the enrichment process of the interstellar medium. The advanced nucleosynthesis active in their internal regions, together with episodes of deep convective mixing, are responsible for a significant variations of the surface chemistry. Furthermore, the low effective temperatures and the high rates of mass loss experienced during the AGB phase favour the formation of cold and dense winds, suitable for the condensation of gas molecules into dust. In this presentation, I will discuss the dust formation process coupled with the description of the AGB evolution and the impact of these stars as dust manufacturers for their host environment.

Biography

Flavia Dell'Agli has completed her PhD in Astronomy, at the University of Rome La Sapienza in 2016. She is now a Postdoc at the Instituto de Astrofísica de Canarias. Her main research interest are low-intermediate mass stars and their impact on the history of formation and evolution of different systems. During the last four years she published 22 papers on this topic, six as first author, being involved in several international projects.

fdellagli@iac.es

Notes: