

The 13th Torino Workshop on AGB stars & the 3rd Perugia Workshop on Nuclear Astrophysics



Contribution ID: 74

Type: **Oral (remotely)**

How important are Asymptotic Giant Branch Star in Astrophysics? (R)

Thursday, 23 June 2022 09:00 (25 minutes)

Asymptotic giant branch stars (AGB) represent an important phase in stellar evolution, because of the important physical processes involved in describing their internal structure and evolution. About half of the heavy elements beyond iron were produced during their peculiar evolutionary phases. Furthermore, the diversity of the nuclear processes determining the nucleosynthesis in these stars have initiated experimental activities to measure relevant reaction rates needed to determine the nuclear energy production and nucleosynthesis. The present contribution is primarily aimed at appreciating the effort and contribution of Prof. Maruzio Busso and collaborators that helped developing this exciting subject in astrophysics. After a short description of the basic characteristics of the AGB stars, a list of essential nucleosynthesis processes will be highlighted.

Session

Stellar nucleosynthesis

Primary author: EL EID, Mounib (American University of Beirut (AUB))

Presenter: EL EID, Mounib (American University of Beirut (AUB))

Session Classification: Stellar Nucleosynthesis