Nuclei in the Cosmos (NIC XVII)



Contribution ID: 211 Type: Invited

Questions in Experimental Nuclear Astrophysics

Monday, 18 September 2023 09:15 (30 minutes)

Nuclear Astrophysics is low energy reaction physics –with stable and radioactive nuclei. The goal of the field is to understand critical reaction cross sections at stellar energies which are typically not directly accessible by experiment. The reaction rates therefore depend on reliable extrapolation of the reaction rates towards the stellar energy regime. A number of near threshold effects may cause unexpected changes in the reaction cross sections at those conditions. I will present a number of these cases and will discuss how such changes may impact the reaction rates and the corresponding stellar observables.

Primary author: Prof. WIESCHER, Michael (University of Notre Dame)

Presenter: Prof. WIESCHER, Michael (University of Notre Dame)

Session Classification: The s-process

Track Classification: The s-process