



Contribution ID: 398

Type: **Invited Presentation**

Experimental studies of explosive nucleosynthesis

Exotic nuclei play a critical role in explosive astrophysical scenarios. As well as driving nucleosynthesis, their production and subsequent observation provides signatures of underlying explosion mechanisms or stellar progenitors. Such observations include light curves, such as from supernovae or X-ray bursts, or gamma-ray lines or evidence of their decay in solar and pre-solar material. There is a wealth of observational data that cannot be fully interpreted therefore until the nuclear physics is sufficiently constrained. Developments in radioactive beam production are now enabling new experiments to be performed, using novel techniques, to address these uncertainties. This talk will present recent experimental studies that illuminate these observations of explosive stellar systems.

Author: LAIRD, Alison (University of York)

Presenter: LAIRD, Alison (University of York)

Session Classification: Nuclear Astrophysics, Astroparticle Physics and Synergies with Nuclear Physics

Track Classification: Nuclear Astrophysics