



Contribution ID: 152

Type: **Invited Talk**

Nuclear physics and r -process observables

Wednesday, 22 September 2021 09:45 (30 minutes)

Our understanding of the formation of the heaviest elements via r -process nucleosynthesis is built up through the detection and analysis of a variety of astrophysical observables: isotopic and elemental abundance patterns, electromagnetic signatures, and radioisotopes. The interpretation of each type of observable is complicated by the unknown nuclear physics of the thousands of neutron-rich species that participate in the r process. Here we will describe a few examples of how r -process observables can be exploited to provide clues as to the nature of r -process site(s) of production, and note how current and upcoming experiments at radioactive beam facilities can provide crucial data and fresh insight.

Primary author: SURMAN, Rebecca (University of Notre Dame)

Presenter: SURMAN, Rebecca (University of Notre Dame)

Session Classification: Session 6

Track Classification: Nuclear Astrophysics