## **Advances in Radioactive Isotope Science**



ID de Contribution: 540 Type: oral contribution

## First results with the Advanced Rare Isotope Separator (ARIS) at FRIB

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Commissioning of the Facility for Rare Isotope Beams (FRIB) in-flight separator system Advanced Rare Isotope Separator, ARIS, began in early 2022. The system consists of up to three stages of achromatic separation based on large superconducting magnets and can deliver beams to various experimental stations for nuclear and astrophysics studies, as well as other societal needs. ARIS is designed to be able to work with 400kW of primary beam power. The conceptual design and the comparison to commissioning studies will be presented.

In this contribution we summarize first results of rare beam isotopes production, and then to focus on high Z isotopes production in the recent commissioning experiment, that demonstrates ARIS abilities to separate and identify isotopes produced in the energy range of 100-200~MeV/u. Isotope production results and comparison with production models will be presented.

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