TRIUMF Advanced Rare Isotope Laboratory (ARIEL)

Contribution ID: **59** Type: **Contributed poster presentation**

# Opportunities for direct measurements of weak r-process reactions with ARIEL beams

Work has already been done at TRIUMF to directly study ($\alpha$,$n$) reactions using both DRAGON and EMMA, with the aid of the DEMAND neutron detector array. These reactions are important for understanding both the weak r-process and the s-process. Many of the reactions relevant to the weak r-process involve neutron-rich radioactive nuclei. ARIEL will expand TRIUMF's rare isotope beam capabilities and broaden the opportunities for direct studies of these reactions.

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**Session Classification:** Reception & Poster Session