



UNISA



**International symposium on New Developments in Methods and Applications
of Few-body Physics: in Memory of Professor SA Sofianos**

Contribution ID: 8

Type: **Oral Presentation**

Elastic breakup of ${}^6\text{Li}$ on different targets

We study the ${}^6\text{Li}$ breakup on different target masses in order to investigate the dependence of continuum-continuum couplings and Coulomb-nuclear interference on the target mass. We show that excluding the continuum-continuum couplings, the integrated total and nuclear breakup cross sections decrease linearly as function of $A_T^{1/3}$, while the integrated Coulomb breakup decrease linearly as function of the target charge. The Coulomb-nuclear interference scales linearly as function of the target charge when all the different couplings are included in the potential matrix element.

Primary author: Dr MUKERU, Bahati (University of South Africa)

Presenter: Dr MUKERU, Bahati (University of South Africa)

Track Classification: Oral Presentations