Contribution ID: **155** Type: **Poster**

Sizes and shapes of Tm isotopes explored via laser spectroscopy

High resolution laser spectroscopy has been used to study the atomic hyperfine structure of thulium isotopes (Z=69). This technique results in a model independent measurement of the nuclear magnetic dipole and electric quadrupole moments, as well as the change in mean-square charge radius, with respect to the stable 169Tm. Collinear laser spectroscopy measurements were performed using the COLLAPS experiment based at ISOLDE, CERN. From a preliminary study to measure isotope yield and assess the chosen transition, measurements of thulium isotopes ranging from 155 –175 were taken and have been analysed, with these results being the focus of the poster. This paves the way for studying the more neutron-deficient isotopes of thulium.

Work-package

WP2 - RIs for Nuclear Physics

Facility identifier

ISOLDE

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Session Classification: Cocktail - Poster session