

Multiple Coulomb Excitation of ^{72}Zn with MINIBALL at ISOLDE using a new Coulex silicon geometry

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The standard Coulomb Excitation setup at MINIBALL uses a forward CD at fixed distance to the target, only. We built a new setup, based on the T-REX design, to allow a variable distance of the forward CD as well as to cover backward angles in the laboratory frame. This allows to use high intense beams and gives better insight into multiple coulomb excitation studies. Multiple coulomb excitation studies will be performed intensively at HIE-ISOLDE at 5 MeV/u and more.

The new setup was used for a couple of experiments in autumn 2012 at ISOLDE. We here present this new setup and show spectra of ^{72}Zn after multiple coulomb excitation using intensities of more than 10^8 pps. The good statistics for the $4+1$ gamma decay will contribute to the ongoing discussion on diverging data from experiments using AGATA and MINIBALL on $4+1$ states in the neutron-rich zinc isotopes.

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