Contribution ID: **50** Type: **poster**

Spectrometer studies for HIE-ISOLDE

The planned High Intensity and Energy (HIE) upgrade of the radioactive beam facility ISOLDE will enable postacceleration of radioactive beams up to an energy of about 10 MeV/u in the final stage of the upgrade, thus opening the door to nuclear reaction studies. In the case of transfer reactions in inverse kinematics a recoil separator is often well suited or even needed to tell recoils and beam apart and to select the exit channel or to do spectroscopic studies. Two different types of spectrometer designs are being considered for HIE-ISOLDE, namely a recoil mass separator or a raytracing type of spectrometer. A set of nuclear transfer reactions in inverse kinematics have been simulated using realistic parameters for HIE-ISOLDE.

The performance of the two types of spectrometer designs is compared and their scientific possibilities and limitations discussed based on the simulation results. To evaluate the validity of the simulations a data set from PRISMA at LNL is compared with simulation results and a comparison between simulations and these data will be presented.

Is this an invited talk? (please answer yes or no)

no

Would you prefer your contribution to be a poster presentation? (please answer yes or no)

yes

Would you prefer your contribution to be an oral presentation? (please answer yes or no)

no

Are you a student, postdoc or an attendee from an "emerging"country and would like to apply for financial support?

no

Primary author: TVETEN, Gry (University of Oslo)

Co-author: CEDERKÄLL, Joakim (Lund University)

Presenter: TVETEN, Gry (University of Oslo)

Track Classification: Future RIB facilities