

## **Status of Beam Dynamics Design Studies for the HIE-ISOLDE Energy Upgrade**

*Tuesday 26 November 2013 10:20 (20 minutes)*

A status report covering recent design and machine development studies for the HIE-ISOLDE linac will be presented. The presentation will be focused on the design and specification of the 10 MHz bunching system to provide beams with an increased bunch spacing of  $\sim 100$  ns. The feasibility of chopping the 'unbunched' background created during the bunching process will be demonstrated. Other studies will be introduced in the HIE-ISOLDE context: development of an automatic cavity tuning algorithm, studies of the REX A/q-separator, 3D electromagnetic simulations of the RFQ and the effects of stray magnetic fields on beam delivery in the experimental hall (HEBT).

**Primary author:** FRASER, Matthew Alexander (CERN)

**Presenter:** FRASER, Matthew Alexander (CERN)

**Session Classification:** Technical HIE\_ISOLDE