Contribution ID: **260** Type: **Invited Speaker / Conférencier invité**

TITAN ion trap experiments for nuclear structure

Tuesday 17 June 2014 08:45 (30 minutes)

The TITAN (Triumf's Ion Trap for Atomic and Nuclear science) system is set up the ISAC rare beam facility at TRIUMF and enables precision experiments on very short-lived rare species. I present new measurements of atomic masses for nuclear structure in the so-called Island of Inversion, and for light Mg isotopes, where tests of the IMME were possible. The latter allowed for tests of the influence of three body forces in the theoretical description. Moreover, the ion trap system makes it possible to carry out decay studies of stored highly charged ions. These experiments are motivated by double beta decay searches and the need for benchmarking the theoretical framework of the transition matrix elements.

Author: Prof. DILLING, Jens (TRIUMF/ University of British Columbia)

Presenter: Prof. DILLING, Jens (TRIUMF/ University of British Columbia)

Session Classification: (T1-4) Mass Spectrometry and Nuclear Structure - DNP / Spectrométrie de masse et structure nucléaire - DPN

Track Classification: Nuclear Physics / Physique nucléaire (DNP-DPN)