

Abstract Submitted  
for the HAW05 Meeting of  
The American Physical Society

**Decay of  $^{47-50}\text{Ar}$  isotopes.** UFFE BERGMAN, JOAKIM CEDERKALL, LUIS FRAILE, SERGE FRANCHOO, TOMAS FRITIOFF, ULLI KOESTER, THOMAS NILSSON, ISOLDE, CERN, OLIVER ARNDT, IRIS DILLMANN, OLIVER HALLMAN, KARL-LUDWIG KRATZ, BERND PFEIFFER, Institut für Kernchemie, Universität Mainz, LAURANT GAUDEFROY, OLIVER SORLIN<sup>1</sup>, ALEXANDRE LISETSKY, NSCL, MSU — Information on beta-decay properties of neutron-rich  $^{47-50}\text{Ar}$  was obtained at the ISOLDE mass-separator facility at CERN using isobaric selectivity. This was achieved by a combination of a plasma-ion source with a cooled transfer line and subsequent mass-separation. Most of these beams suffer from intense multi-charged symmetric fission contaminants that cannot be mass-separated from asymmetric fission argon products. The identification of the gamma-ray transitions from  $^{47-50}\text{Ar}$  decay was performed by comparing the spectra obtained from direct proton bombardment of the ISOLDE target and those obtained with the neutron converter. In addition, an Electron Cyclotron Resonance Ion Source (ECRIS) installed at ISOLDE was used for purification of the singly-charged  $^{48}\text{Ar}$  beam. The obtained data are compared to the result of large-scale shell model calculations and QRPA predictions. Implication of the obtained information for a better understanding of the origin of the  $^{48}\text{Ca}/^{46}\text{Ca}$  isotopic anomaly discovered in inclusions from the Allende meteorite is discussed.

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Date submitted: 04 May 2005

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