



Contribution ID: 8

Type: **Submitted**

Shape coexistence in odd-Au isotopes investigated with BEGe detectors

Friday 4 December 2015 10:00 (15 minutes)

The shape coexistence in $^{181,183,185,187,189}\text{Au}$ was investigated via β^+/EC decay of corresponding Hg isotopes. Samples of Hg isotopes were produced by deposition of low-energy beam from ISOLDE facility. For this purpose a new travelling setup, the TATRA tape transportation system was developed. It uses the metallic tape prepared by rapid quenching of alloy melt producing amorphous metal. Because of this material, the system has excellent vacuum properties.

Novel Broad Energy Germanium (BEGe) detector BE2020 was used to detect γ rays. Its excellent energy resolution makes it very promising type of detector for future decay studies. As it will be presented it allows to construct comprehensive level schemes based dominantly on spectra of γ ray singles. Preliminary results of the analysis of ^{183}Au data will be presented. Moreover, technical issues of the TATRA system and fundamental characteristics of the the BEGe detector will be discussed in the presentation.

Author: Dr VENHART, Martin (Institute of Physics, Slovak Academy of Sciences)

Presenter: Dr VENHART, Martin (Institute of Physics, Slovak Academy of Sciences)

Session Classification: Hyperfine Interactions & Beta Decay Studies