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β decay of fission fragments with total absorption gamma-ray spectroscopy at IGISOL

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In this contribution we will present the study of beta decays of interest for reactor antineutrino spectrum calculations using the Total absorption gamma-ray spectroscopy (TAGS). Measurements of the beta decays of several fission fragments including 103,108Tc, 103,108Mo and 95,96Sr were done at the Ion Guide Isotope Separator On-Line facility in Jyväskylä [1] using the Decay Total Absorption gamma-ray Spectrometer (DTAS) [2].
The complete beta intensity distributions have been obtained based on the analysis approach developed at IFIC [3, 4, 5] and they show that previous beta intensities determined with germanium detectors were incomplete due to the Pandemonium effect [6]. In the present contribution we will stress the usefulness of a segmented spectrometer to evaluate the consistency of the results looking at the spectra with multiplicity conditions.
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