

Abstract Submitted
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Decays of neutron rich rubidium isotopes studied with Modular Total Absorption Spectrometer (MTAS)¹ DARREN MCKINNON, ROBERT GRZYWACZ, University of Tennessee, BERTIS RASCO, NATHAN BREWER, KRZYSZTOF RYKACZEWSKI, Oak Ridge National Laboratory, ALEKSANDRA FIJALKOWSKA, MARZENA WOLINSKA-CICHOCKA, MAREK KARNY, University of Warsaw, KATHLEEN GOETZ, University of Tennessee, CARL GROSS, DANIEL STRACENER, Oak Ridge National Laboratory, ED ZGANJAR, Louisiana State University, JON BATCHELDER, Berkeley National Laboratory, JEFF BLACKMON, Louisiana State University, THOMAS KING, University of Tennessee, KRZYSZTOF MIERNIK, University of Warsaw, STAN PAULAUSKAS, University of Tennessee, MUSTAFA RAJABALI, Tennessee Technological University, JEFF WINGER, Mississippi State University — Total absorption spectroscopy is a highly efficient method for detecting gamma radiation from beta decay. The Modular Total Absorption Spectrometer (MTAS) consists of nearly one ton of NaI(Tl) and allows for the determination of beta-feeding distributions over the entire decay window. These studies provide unique insight into nuclear structure, properties of nuclear reactor decay heat, and the anti-neutrino spectrum for nuclear reactors. This presentation presents recent results from decays of neutron rich Rb isotopes in the transitional region near N=60 studied at the ORNL Tandem. In preparation for implementation of MTAS at CARIBU at Argonne National Laboratory, new auxiliary beam diagnostic detectors have been added to MTAS and preliminary results will be shown during the presentation.

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