

# Total Absorption Measurements as a Benchmark for Nuclear Models

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Nuclear models are used in many astrophysical applications, in particular to predict nuclear data presently not available for exotic nuclei.

Total absorption spectroscopy (TAS) is accepted as the only method that can provide beta decay data free from the so-called Pandemonium effect [1,2]. Our collaboration is involved in a research program aimed to measure the beta decay of fission products that are important contributors to the decay heat as well as for the prediction of the neutrino spectrum in nuclear reactors [3,4]. The obtained data from these measurements can also be of relevance for testing nuclear models. In this contribution we will present the comparison of the beta strength deduced from our measurements, with theoretical predictions using the FRDM-QRPA model [4,5]. This model has been used in the past for calculations of half-lives and Pn values for astrophysical network calculations. The quality of the description of the data in the A~100 region will be discussed, a region dominated by shape effects and triaxiality.

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