# Shape effects and the search for pn pairing in the A=70 region

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Recent results of beta decay studies of the near drip line $^{70,71}Kr$ nuclei will be presented in this talk. Nuclei in the mass region around A=70 are considered of particular interest from the perspective of shape effects, configuration mixing, pn pairing in the T=0 channel and isospin symmetry (see for example [1,2,3] and references therein).

Compared to previous studies, the high primary beam intensities available at the RIKEN RIBF facility and the higher experimental sensitivity of the setup employed, allowed us to obtain a richer experimental information on the beta decay of $^{70,71}Kr$ [4,5].

In our study of the beta decay of $^{70}Kr$ into $^{70}Br$, fifteen gamma rays have been identified for the first time, defining ten populated states (previously no excited levels were known from the beta decay) [4]. One particular result in this case is an increase in the beta strength to the yrast 1+ state in comparison with the heaviest Z=N+2 system studied so far ($^{62}Ge$ decay) [6,7] that may indicate increased np correlations in the T=0 channel.

Similarly in the beta decay of $^{71}Kr$ to $^{71}Br$ nine new levels have been identified preliminarily [5] solving some inconsistencies observed in the past [8].

The new results will be presented and discussed from the perspective of model calculations (QRPA and a pseudo-SU(4) model) [9,10].

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