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β-decay half-lives of neutron-rich nuclei at $A \sim 110$ on r-process path IPPEI NISHIZUKA, TOSHIYUKI SUMIKAMA, Tohoku University, FRANK BROWNE, ALISON BRUCE, University of Brighton/RIKEN Nishina Center, SHUNJI NISHIMURA, PIETER DOORNENBAL, GIUSEPPE LORUSSO, RIKEN Nishina Center, ZENA PATEL, SIMON RICE, University of Surrey/RIKEN Nishina Center, LAURA SINCLAIR, University of York/RIKEN Nishina Center, PAR-ANDERS SODERSTROM, RIKEN Nishina Center, HIROSHI WATANABE, Beihang University/RIKEN Nishina Center, JIN WU, Peking University/RIKEN Nishina Center, ZHENGYU XU, University of Tokyo, AYUMI YAGI, Osaka University, EURICA COLLABORATION — About half of the elements heavier than iron are thought to be produced by rapid-neutron capture process (r-process). The observed natural abundance in solar system was underestimated by a theoretical model at $A \sim 110$, which uses β-decay half-lives. In the present study, we measured new β half-lives of neutron-rich nuclei on r-process path at RIBF in RIKEN. The nuclei of interest were produced by in-flight fission of uranium beam in beryllium target. The WAS3ABi detector which was 5 stacked double-sided silicon strip detectors ($60 \times 40 \times 1$ mm^3), was used for the implantation of ions and the detection of both the implanted ions and the subsequently-emitted β rays. It is essential to make a position correlation between the mother nucleus and the β rays. In this talk, the analysis of the position correlation will be presented in detail. Preliminary results will be also shown.

Ippei Nishizuka
Tohoku University

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