**MEASUREMENT OF THE HEAVIEST BETA-DELAYED NEUTRON-EMITTERS WITH BELEN**

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Beta-delayed neutron (βn) emission plays an important, two-fold role in the stellar nucleosynthesis of heavy elements. In the "rapid neutron-capture process" this lead to a detour of the material beta-decaying back to stability and the released neutrons increase the neutron-to-seed ratio. In this way the final solar r-abundances are directly influenced and an accurate knowledge of the neutron branching ratio of very neutron-rich isotopes is a crucial parameter in r-process simulations.

The BELEN detector has been used in several recent campaigns at the IGISOL facility in Jyvaskyla and at the FRS at GSI Darmstadt to determine half-lives and neutron branching ratios of very neutron-rich isotopes. Among these recently measured isotopes are the heaviest B1n emitters around A~210 (R. Caballero-Folch et al., subm. to PRL (2016)), the heaviest β2n emitter $^{136}$Sb, and several isotopes labelled by the IAEA as "high priority".

In the next 2 years the BRIKEN project ("Beta-delayed neutron measurements at RIKEN for nuclear structure, astrophysics, and applications") will focus on the most exotic βn-emitters which can presently be produced. The setup combines $^{3}$He-filled neutron counters from Germany, Japan, Russia, Spain, and the USA, and the implantation detector AIDA from the UK to the presently largest and most efficient neutron detection array. The setup phase has been started in summer 2016, and first experiments are planned soon. Several measuring campaigns will map the region between $^{76}$Co and $^{152}$Ba and measure almost 100 β1n and β2n- emitters for the first time, as well as the heaviest β3n-emitters.