

**SEARCH FOR DOUBLE  $\beta$  DECAYS OF  $^{96}\text{Ru}$  AND  $^{104}\text{Ru}$   
WITH HIGH PURITY Ge  $\gamma$  SPECTROMETRY**

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Experiment to search for double  $\beta$  decay of  $^{96}\text{Ru}$  and  $^{104}\text{Ru}$  is in progress in the underground Gran Sasso National Laboratories of the INFN (Italy) with the help of ultra-low background high purity (HP) Ge  $\gamma$  spectrometry. After 2162 h of data taking with 473 g ruthenium sample in low-background set-ups with HP Ge detectors, new improved limits on  $2\beta$  processes in  $^{96}\text{Ru}$  and  $^{104}\text{Ru}$  have been established on the level of  $10^{18}$ – $10^{19}$  yr.

*Keywords:* double beta decay,  $^{96}\text{Ru}$ ,  $^{104}\text{Ru}$ .