**Investigation of $^{246}$Fm : in-beam spectroscopy at the limits**

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The structure of $^{246}$Fm has been investigated using in-beam $\gamma - ray$ spectroscopy. The experiment was performed at the University of Jyväskylä using JUROGAM 2 associated to RITU and GREAT. The $^{246}$Fm Nuclei were produced using a beam of $^{40}$Ar impinging on a target of $^{208}$Pb at an energy of 186MeV. JUROGAM 2 was fully instrumented with TNT2 digital acquisition cards. The use of digital acquisition cards and the rotating target allowed for unprecedented beam intensities up to 71 particle-nanoampers. This permitted to overcome a record cross-section of 10 nanobarns for prompt spectroscopy of $^{246}$Fm and revealed already online a serie of transitions forming a rotational band.
After discussing the use of digital electronics for in-beam $\gamma - ray$ spectroscopy, the results of the analysis will be presented.