Abstract Submitted
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An evidence for SF decay of 284Fl[1] KRZYSZTOF RYKACZEWSKI, ORNL, NATHAN BREWER, ORNL-JINPA, ROBERT GRZYWACZ, UTK-ORNL, KRZYSZTOF MIERNIK, ORNL-UW, VLADIMIR UTYONKOV, YURY OGANESSIAN, ALEXANDR POLYAKOV, YURY TSYGANOV, ALEXEI VOINOV, MAX SHUMEYKO, JINR-Dubna — In order to expand our knowledge of the properties of superheavy nuclei and to partially fill the gap between the Island and Mainland, experiments with 239,240Pu targets and 48Ca beams were initiated at Dubna in November 2013. These studies are being performed using a new digital detection system commissioned by the ORNL-UTK team and implemented at the DGFRS (FLNR, JINR Dubna). An on-line test at the DGFRS using the 48Ca+natYb reaction allowed direct observation of alpha decay from thorium isotopes including 1-μs activity of 219Th. Irradiation of the 239Pu target, with a total beam dose of about 1.3×10^{19}, was performed between December 2013 and February 2014. The evidence for a new sub-millisecond isotope 284Fl will be presented and discussed.

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