Contribution ID: **158** Type: **Oral talk (15 min + 5 min questions)**

First tests on GRAND set-up

Tuesday, 12 July 2022 15:40 (20 minutes)

GRAND is a Gas-filled Recoil Analyzer and Nuclei Detector (see Fig.1), which created for experiments on the synthesis of super heavy elements. Facility is installed at 4th beam line of the cyclotron DC-280[2] in the SHE Factory at FLNR [1]. This separator has the scheme QvDhQhQvD. Helium with a pressure of P=0.7-1.5 mBa is used as the gas. The ion optical calculations for the complete system have been checked by placing 226Ra source at the target position and transporting the emitted α-particles to a position sensitive detector at the focal plane.

As well as tests with complete fusion reactions 174Yb(48Ca,xn)222Th, *170Er(48Ca,xn)218Ra* and 208Pb(48Ca,xn)256No* were done.

1. S. Dmitriev, et al., Status EPJ Web Conf.131 (08001) (2016) 1-6.
2. G.G. Gulbekian, et al., Phys. Part. Nuclei Lett. 16 (6) (2019) 866-875.

The speaker is a student or young scientist

Yes

Section

1. Nuclear structure: theory and experiment

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