Contribution ID : **371** Type : **Poster**

TOTAL REACTION CROSS SECTIONS OF NEUTRON-RICH LIGHT NUCLEI MEASURED BY THE COMBAS FRAGMENT-SEPARATOR

Monday, 22 October 2018 15:40 (150)

Preliminary results of measurements of the total reaction cross sections σR for weakly bound 4He, 6He, 8He, 7Li, 8Li, 9Li, 11Li, 7Be, 9Be, 10Be, 11Be, 12Be, 8B, 10B, 11B and 12B nuclei at energy range (10-45) A MeV with 28Si and 181Ta target are presented. The secondary beams of light nuclei were produced by bombardment of the 15N (50 A MeV) primary beam on Be target and separated by COMBAS fragment-separator. In dispersive focal plane a horizontal slit defined the momentum acceptance as 1% and a wedge degrader of 600 μm Al was installed. The Bρ of the second section of the fragment-separator was adjusted for measurements in energy range (10-45) A MeV. The strong absorption model reproduces the A-dependence of σR, but not the detailed structure. We are comparing our experimental data with Glauber multiple scattering theory and preliminary results are obtained.

Primary author(s) : BATCHULUUN, Erdemchimeg (JINR); Dr. ARTUKH, Anatoly; Prof. SUREN, Davaa; ISATAEV, Talgat; Ms. HUE , Bui; Mr. KLYGIN, Sergey; Dr. KONONENKO, Gennady; Prof. GONCHIGDORJ, Khuukhenkhuu; Dr. LUKYANOV, Sergey; Dr. MIKHAILOVA, Tatyana; Prof. PENIONZHKEVICH, Yuri; Mr. SEREDA, Yuri; Mr. VORONTSOV, Andrey; Dr. MASLOV , Vladimir; Mr. MENDIBAEV, Kairat

Presenter(s) : BATCHULUUN, Erdemchimeg (JINR)

Session Classification : Poster session and coffee-buffet

Track Classification : Nuclear physics