Contribution ID: **313** Type: **Poster report**

Optimization of digital signal processing algorithms for neutron detector based on Cs26LiYCl6:Ce scintillator.

Wednesday 14 October 2020 18:50 (20 minutes)

One of the promising type of scintillation detector for neutron registration and spectroscopy is Cs26LiYCl6:Ce. The work presents study of characteristics of this detector. Optimization of digital algorithms for neutron/gamma-separation was performed. Pulse shape discrimination quality of charge integration and correlation analysis was investigated. Also tuning of pulse start time measuring was carried out. Time resolution for signals obtained from registration neutrons and gamma-rays was compared.

Primary authors: BOBROVSKIY, Timofey (IPPE); Mr BONDARENKO, Ivan (I.I. Leypunsky Institute for Physics and Power Engineering (IPPE)); Mr KETLEROV, Vladimir (I.I. Leypunsky Institute for Physics and Power Engineering (IPPE)); KHROMYLEVA, Tatiana (IPPE); KHRYACHKOV, Vitaly (IPPE); PRUSACHENKO, Pavel (IPPE)

Presenter: BOBROVSKIY, Timofey (IPPE)

Session Classification: Poster session 3 (part 2)

Track Classification: Section 3. Modern nuclear physics methods and technologies.