



Contribution ID: 47

Type: **not specified**

The SPI source of polarized ions for the NUCLOTRON

Tuesday, 10 July 2018 11:30 (30 minutes)

The high intensity pulsed source of polarized ions (SPI) has been developed at JINR in collaboration with INR RAS for injection of polarized deuterons and protons into the Nuclotron and future collider of heavy and light ions NICA. The SPI is an atomic beam-type polarized ion source with a charge-exchange plasma ionizer and a storage cell in the ionization region. The source was commissioned and used in the NUCLOTRON runs in 2016 and February –March 2017. Polarized and unpolarized deuteron beams as well as polarized proton beam were produced to accelerate in the NUCLOTRON.

Deuteron beam polarization of 0.6-0.9 of theoretical values for different modes of high frequency transition units has been measured with the NUCLOTRON ring internal polarimeter for the accelerated deuteron and proton beams.

Presenter: Dr FIMUSHKIN, Victor (Joint Institute for Nuclear Research)

Session Classification: Polarised beams at NICA