Contribution ID: **2000** Type: **Oral**

Current status of the 18 GHz ECR Ion source DECRIS-5M at JINR FLNR

Thursday 30 October 2025 14:15 (15 minutes)

The Flerov Laboratory of Nuclear Reactions of the Joint Institute for Nuclear Research continues work on the development of a complex for applied research. The main part of which is the DC-140 cyclotron which will be used as the basic facility. In accordance with the requirements of the experiment, the cyclotron will be used to accelerate intense ion beams with a mass to charge ratio from 5 to 8.25 and two fixed energies 2.1 and 4.8 MeV/nucleon.To generate beams with the required intensity and A/Z ratio, an 18 GHz ECR ion source (DECRIS-5M) has been developed.
The paper presents the test results of the DECRIS-5M ion source at the ECR test bench. During the work, the operating modes of the source were tested using various methods of supplying the working substance. Ion beams of Ne, Ar, Kr, Xe, Ti, Fe and Bi were obtained.

Author: БЕРЕСТОВ, Кирилл (JINR)

Co-authors: Mr LEBEDEV, Alexander (JINR); Mr BONDARCHENKO, Andrei (FLNR JINR); PODOYNIKOV, Daniil; PUGACHEV, Dmitry (JINR FLNR); KUZMENKOV, Konstantin (JINR); LOGINOV, Vladimir (Nikolaevich); MIRONOV, Vladimir (JINR)

Presenter: БЕРЕСТОВ, Кирилл (JINR)

Session Classification: Accelerator Technologies and Neutron Sources

Track Classification: Accelerator Technologies and Neutron Sources