Contribution ID: 1946 Type: Oral

## Development of precision temperature measurement module for cryogenic systems

Tuesday 28 October 2025 12:15 (15 minutes)

Cryogenic technology has been constantly developing due to the advent of relatively inexpensive and high-quality superconducting cables, including those of domestic production. Thermometry system based on cryogenic temperature sensors and special measururement electronic modules is an important element for ensuring and monitoring the operation of cryogenic devices and complexes.

The article descrides the development of the precision electronics module PKT-4SD, which is basis of thermometry system of the electron-string ion source (ESIS) KRION-6T. ESIS KRION-6T is one of the main part of JINR VBLHEP NICA injector.

Author: MYKHACHEV, Stepan (Dubna University)

Co-authors: Dr PONKIN, Dmitry (JINR); BUTENKO, Elizaveta (JINR, LHEP, Dubna 141980); MATYUKHANOV,

Evgeny (JINR LHEP); MALYSHEV, Nikolay (LHEP); PANTELEEV, Zakhar (Dubna State University)

Presenter: MYKHACHEV, Stepan (Dubna University)

Session Classification: Instruments and Methods of Experimental Physics

Track Classification: Instruments and Methods of Experimental Physics