

REFERENCE TRACKING SYSTEM FOR PERFORMANCE STUDIES OF SMALL STRAW TRACKER PROTOTYPES FOR THE FUTURE SPD DETECTOR AT THE NICA COLLIDER

*M. Banshchikova^{a,b,1}, E. Kuznetsova^{b,c}, A. Lapkin^d,
S. Romakhov^d, D. Sosnov^c, V. Bautin^d,
K. Salamatin^d, T. Zholdybayev^b, T. Enik^d*

^a Al-Farabi Kazakh National University, Academy of Sciences
of the Republic of Kazakhstan, Almaty, 050040, Kazakhstan

^b Institute of Nuclear Physics, Almaty, 050032, Kazakhstan

^c B. P. Konstantinov Petersburg Nuclear Physics Institute,
National Research Centre “Kurchatov Institute”, Gatchina, 188300, Russia

^d Joint Institute for Nuclear Research, Dubna, 141980, Russia

We present performance studies of small straw tracker prototypes developed for further application in the NICA SPD. To evaluate the straw tracker prototype performance, reference tracking and timing system was used. Data collected during the muon test beam campaign at the SPS H4 beam line was analyzed.

Представлено исследование характеристик прототипов строу-трекера для последующего применения в SPD NICA. Для оценки характеристик прототипов использовалась референсная система для определения времени и треков частиц. Проанализированы данные, полученные в результате тестовой кампании на мюонном пучке на линии SPS H4.

PACS: 29.40.Gx; 29.20.db

Received on December 5, 2025.

¹E-mail: margaretbanshchikova@gmail.com