

First results of operation of the new large-scale drift chamber detector

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The large-scale coordinate-tracking detector TREK for registration of inclined EAS is being developed in MEPhI. Detector is based on the multiwire drift chambers from the neutrino experiment at the IHEP U-70 accelerator, their key advantages are a large effective area (1.85 sq.m), a good coordinate and angular resolution with a small number of measuring channels. Detector will be operated as a part of the unique scientific facility NEVOD, in particular, jointly with Cherenkov water detector (CWD) with volume of 2000 cubic meters and coordinate detector DECOR. The first part of the detector named Coordinate-Tracking Unit based on the Drift Chambers (CTUDC) representing two coordinate planes of 8 drift chambers in each has been developed and mounted on the opposite sides of the CWD. It has the same principle of joint operation with NEVOD-DECOR triggering system and the same drift chambers alignment, so main features of the TREK detector will be examined. Results of a cross-calibration of the CTUDC and coordinate-tracking detector DECOR and a joint operation with NEVOD-DECOR complex are presented.

Primary author(s) : Mr. ZADEBA, egor (nrnu mephi)

Co-author(s) : BOGDANOV, Aleksei (National Research Nuclear University MEPhI (Moscow Engineering Physics Institute)); Mr. OVECHKIN, Alexandr (MEPhI); Dr. BAORISOV, Anatoly (IHEP); Dr. KOZHIN, Anatoly (IHEP); Prof. PETRUKHIN, Anatoly (National Research Nuclear University MEPhI); Mr. CHERNOV, Dmitrii (MEPhI); Prof. YASHIN, Igor (National Research Nuclear University MEPhI); Dr. KOMPANIETS, Konstantin (MEPhI); Mr. DUSHKIN, Lev (MEPhI); Dr. BARBASHINA, Natalia (National Research Nuclear University MEPhI (Moscow Engineering Physics Institute)); Mr. AMPILOGOV, Nikolay (MEPhI); Mr. VOLKOV, Nikolay (MEPhI); Dr. KOKOULIN, Rostislav (National Research Nuclear University MEPhI); Dr. KHOKHLOV, Semen (MEPhI); Dr. SHUTENKO, Victor (National Research Nuclear University (MEPhI)); Mr. VOROBYEV, Vladislav (Mephi); Mr. OVCHINNIKOV, Vyacheslav (MEPhI); Mr. SELYAKOV, Vyacheslav (MEPhI)

Presenter(s) : Mr. ZADEBA, egor (nrnu mephi)

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