Contribution ID: **13** Type: **20 min.**

The Liquid Scintillator Track Detector

Tuesday 16 September 2025 14:30 (30 minutes)

A track detector based on a liquid scintillator is being developed at JINR VBLHEP. Liquid xenon is supposed to be used as the active medium in the final version of the detector. The detector is a steel vessel with windows for registration scintillation flashes. Light registration is carried out by position-sensitive elements - SiPM matrices of 8x8 cells. The purpose of the detector being developed is to register recoil nuclei from neutral particles, as in experiments searching for direct signals from dark matter. The results of the development of a detector using a LAB scintillator and testing of the detector by cosmic rays are presented.

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Session Classification: Progress in experimental studies in high energy centers - JINR, CERN, BNL, JLAB, GSI, etc.

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