

## The results of the first experimental series carried out at the NEVOD-EAS shower array

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For studying muon bundles arriving at various zenith angles, the method of the local muon density spectra (LMDS) is used at the experimental complex NEVOD-DECOR (MEPhI, Moscow). Estimation of the primary particle energy by means of this method has a rather low accuracy –  $\sigma(\lg E_0) \sim 0.4$  – due to contribution of extensive air showers (EAS) registered at different distances from the axis to the events with a fixed local muon density. To reduce the primary energy estimation uncertainties, the NEVOD-EAS air shower array is being created. The array will ensure independent estimation, by means of a traditional technique, of the size, arrival direction and axis position of the showers registered by with other installations and detectors of the Experimental complex NEVOD in the energy range of  $10^{15} - 10^{17}$  eV. The first part of the NEVOD-EAS shower array including 7 independent clusters of scintillation detector stations is now launched into operation. The results of EAS detection carried out at the NEVOD-EAS during the experimental series from January to July 2018, as well as results of the analysis of joint events in the shower array and NEVOD-DECOR experimental complex will be presented.

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