

Status of the Russian-Italian experiment NEVOD-EAS

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The NEVOD-EAS air shower array is being created in MEPhI in frames of the Russian-Italian collaboration NEVOD-DECOR. The installation is aimed at independent estimations of the size, axis position and arrival direction of extensive air showers (EAS) registered with other detectors of the Experimental complex NEVOD. This information will provide calibration of two novel perspective techniques developed in the Experimental Complex NEVOD for studying inclined muon bundles – local muon density spectra – as well as for investigation of EAS hadronic component via thermalized neutrons. In 2017 the central part of the array including 6 independent clusters of scintillation detectors located at the area of about 10^4 m^2 was launched into operation. First experimental series has proved the possibility of using the cluster approach to registering system organization and experimental data analysis for the extension of the NEVOD-EAS array with an area of about 10^6 m^2 .

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