Multi-level system of formation of trigger signals for selection of events in the NEVOD detector

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The description of the NEVOD detector multi-level system of trigger signal formation created for on-line selection of events is presented. The first level forms signals of three types for each quasispherical module (QSM) and provides registration of events with one or several photomultipliers. The second level represents a coincidence circuit of triggers from QSM clusters. This level is based on three V1495 CAEN programmable logic units. Each unit processes its own type of trigger signals. One of the units ensures formation of system-wide signal and its broadcasting to all installations of the complex. The fourth unit produces trigger signals from the top and the bottom planes of the calibration telescopes system. The NEVOD detector triggering conditions and their synchronization with other installations are described. Results of studying of the trigger signal counting rates for different coincidence multiplicities and temporal dependences of the used triggers are given.

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