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Parameterization of SiPM signals of MPD/ECal

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The MPD detector at the NICA facility is under construction. One of the key subsystems of the MPD experiment is electromagnetic calorimeter ECal. Modules of the ECal undergo calibration using cosmic muons now. These data were used for parameterization of the digitized SiPM signals after low pass filter at an input of ADC. Few models of SiPM signals were tried and the best one was found. The validity of the parameterization was tested over a wide range of signal amplitudes. The parameterization has been used to estimate time resolution for signals from adjacent towers. Few methods: low threshold, constant fraction and zero crossing have been compared.

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