

## Timing resolution of MPPCs

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We present the results of measurements of the timing resolution of MPPCs for several pixel sizes. By using LED light, we have measured time jitter of pulses which exceed the threshold voltage. The number of photons illuminated on the MPPCs are from 10 to 10000, while the timing resolution stays more or less constant. There are several types of MPPC which have different number of pixels in 1mm x 1mm sensitive area. Here we show our results for 100, 400, 1600, 2500 pixels. Timing resolution as a function of average number of fired pixels shows a clear scaling for several MPPCs, which indicate timing measurement is dominated by the threshold behavior of the analog signals and little relation to the size of the MPPC pixels.

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