

Simulation studies of SR-PPAC

Strip Readout PPAC (SR-PPAC) has a high-speed response for heavy-ion beams owing to correcting signals of electrons drifting between narrow electrodes with no delay. We confirmed that the detector can be applied to RI beams with even more than several 10^5 Hz.

It is expected that SR-PPAC has a good time resolution owing to the fast response. The timing of signal correction is affected by the fluctuation in the process of generating electron avalanche. We performed the simulation of PPAC to estimate the time resolution and obtain a better understanding of the characteristic of PPAC. In this paper, the details of the simulation and the results are reported.

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