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Garfield++ / LTSpice for modelling response of Straw Tubes with custom readout

The aim of this work is to describe method of modeling straw signal using Garfield++ interface to LTspice. Straw Tube Trackers are important detectors in a number of operating and future experiments. When designing such large scale and complex detector it is of extreme importance to run precise simulations. The advantage of such trackers is their large area and small material budget. Examples of already existing trackers: the ATLAS TRT (straw winding technology) and the NA62 tracker (ultrasonic welding). Future trackers, for example STT of DUNE, should also measure signal charge for particle identification.

Section

Nuclear physics (Section 1)

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