

Modelling of position reconstruction in CENNS1ton

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Coherent elastic neutrino nucleus scattering (CENNS) is a process predicted in 1974 but observed for the first time only in 2017 by COHERENT collaboration. Now this collaboration continues CENNS research using detectors with different working materials. One of them is CENNS10 - detector with 10kg of liquid argon (LAr) and two photomultiplier tubes on the top and on the bottom. Using CENNS-10 as an example COHERENT collaboration is preparing the building of CENNS-1ton - detector with mass of working material (LAr) about 1 ton. This poster is about ability of position reconstruction in this detector. Modelling of different photodetectors configuration using ANTS-2 package will be shown. The goal of this work is comparing different configurations from the point of view of position reconstruction ability and accuracy.

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