



ID de Contribution: 147

Type: Non spécifié

## Development of ionized electron readout system in AXEL experiment

A Xenon Electroluminescence (AXEL) experiment aims to overcome the current limitations in the search for the neutrinoless double beta decay from  $^{136}\text{Xe}$  using high pressure gas xenon TPC. In order to read out ionized electrons, we are developing a unique readout system for the AXEL group, the electroluminescence light collection cell (ELCC). Ionized electrons are drifted to ELCC, and they are more accelerated in it to emit electroluminescence light, which is counted to measure energy. Because the emission is the linear amplification process, we can suppress the gain fluctuation and expect to achieve a great energy resolution.

In this poster, I will talk about the problems of the present ELCC and the solution to them.

**Auteur principal:** HIKIDA, Junya (Kyoto univercity)

**Orateur:** HIKIDA, Junya (Kyoto univercity)

**Classification de Session:** Poster session

**Classification de thématique:** No track