PandaX-III: high-pressure gas TPC for Xe136 neutrinoless double beta decay at CJPL

XIANGDONG JI, University of Maryland, PANDAX-III COLLABORATION — The PandaX-III in Chinas Jinping Underground Lab is a new neutrinoless double beta decay experiment using Xe136 high-pressure gas TPC. The first phase of the experiment uses a 4 m³ gas detector with symmetric Micromegas charge readout planes. The gas TPC allows full reconstruction of the event topology, capable of distinguishing the two electron events from gamma background with high confidence level. The energy resolution can reach about 3