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Background reduction by position reconstruction for CANDLES III KENNSUKE YASUDA, Graduate School of Science, Osaka University, TADAFUMI KISHIMOTO, IZUMI OGAWA, SAORI UMEHARA, GO ITO, HIDEKAZU KAKUBATA, MASAKI MIYASHITA, KENJI MATUOKA, RYUTA HAZAMA, Graduate School of Science, Hiroshima University, CANDLES COLLABORATION — CANDLES is the project to search for double beta decay of 48Ca. We use CaF2 crystals as 48Ca sources and scintillation detectors. They are immersed in liquid scintillator. Signals that fire liquid scintillator are backgrounds. Their rejection is achieved by employing pulse shape difference of signals from the CaF2 scintillator and liquid scintillator. In addition to that position resolution helps further to reduce backgrounds. We employed the least squares method to give position of each crystal. We will report the background reduction with a help of position information.

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