

# The low-energy ionization signal and backgrounds in PandaX-4T experiment

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The energy threshold of the traditional liquid xenon time projection chamber limits the sensitivity for detecting light dark matter, boron-8 neutrino, or other low-energy signals. The ionization signals have been proven to have good potential for expanding low-energy signal detection. However, the unexpected cathode and micro-discharging backgrounds are the key problems. In this talk, we will show the low-energy physical results and investigate the source of the unique backgrounds with PandaX-4T data.

## Collaboration (if any)

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