

Commissioning and Characterization of the Tritium Gas Circulation System of the KATRIN Experiment

Authorship annotation

for the KATRIN collaboration

Session and Location

Monday Session, Poster Wall #11 (Robert-Schumann-Room)

Abstract content

The KATRIN (Karlsruhe Tritium Neutrino) experiment aims to measure the mass of the electron anti-neutrino $\overline{\nu}_{\mathit{e}}$ with a sensitivity of $200\text{meV}/c^2$ by measuring the spectrum of the beta electrons close to the kinematic endpoint. The electrons are generated in a windowless gaseous tritium source (WGTS) consisting of T_2 molecules inside an enclosing beam-tube of 10 m length, a diameter of 90 mm and at a temperature of 30 K. A continuous feed of molecular tritium (40 g/day) into the WGTS

Poster included in proceedings:

yes

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Session Classification : Poster Session Monday

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