

# Probing the effective electron anti-neutrino mass with KATRIN

*Friday 19 July 2024 14:45 (15 minutes)*

The Karlsruhe Tritium Neutrino (KATRIN) experiment is probing the effective electron anti-neutrino mass by a precise measurement of the tritium beta-decay spectrum near its kinematic endpoint. Based on the first two measurement campaigns a world-leading upper limit of 0.8 eV (90% CL) was placed. New operational conditions with an improved signal-to-background ratio, the reduction of systematic uncertainties and a substantial increase in statistics allow us to expand this reach. In this talk, I will present the status of the latest results of KATRIN experiment based on the first five measurement campaigns.

## Alternate track

### I read the instructions above

Yes

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