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Direct neutrino mass measurements

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While neutrino oscillations disprove massless neutrinos, decay kinematics give access to their absolute mass value. Using high-precision tritium beta-decay spectroscopy, the KATRIN experiment places the current best limit on the effective electron anti-neutrino mass at 0.8 eV (90% CL). New operational conditions for an improved signal-to-background ratio, the reduction of systematic uncertainties and a substantial increase in statistics allow to expand this reach. This talk will focus on the latest results of the KATRIN experiment, as well as promising projects for direct neutrino mass exploration in the near future.

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