

Direct neutrino mass measurements with KATRIN experiment

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The discovery of neutrino oscillation proves that neutrinos must have non-zero mass. While the differences of squared neutrino mass eigenvalues have been probed by neutrino oscillation experiments, the absolute neutrino mass scale still remains one of the most important open questions in particle and astroparticle physics. By exploiting the single β decay of molecular tritium, the Karlsruhe Tritium Neutrino (KATRIN) experiment currently provides the best sensitivity down to sub-eV level in direct, model-independent neutrino mass measurements. This report will focus on the latest results from the first two scientific campaigns of the KATRIN experiment.

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