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## Calculations for neutrino mass determination using atomic electron capture

We present the normalized distributions of released energy in the EC decay, a tool to obtain the neutrino mass. Our calculations include the exchange and overlap corrections, the shake-up and shake-off atomic effects, the electron screening effects and the intrinsic line widths of Breit–Wigner resonances.

In computing the electrons' wave functions, we used the Dirac-Hartree-Fock-Slater self-consistent method, which was validated in a previous study for such calculations.

We consider two allowed transitions of  $^{95}\text{Tc}$  to  $^{95}\text{Mo}$  for our calculations using the first direct measurement of the gs-to-gs EC Q value of  $^{95}\text{Tc}$  with the JYFLTRAP penning trap mass spectrometry.

Authors: NITESCU, Ovidiu (Comenius University); STOICA, Sabin (CIFRA); SEVESTREAN, vasile

**Presenter:** SEVESTREAN, vasile

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