

Neutron Lifetime Measurement by storing ultracold neutrons and simultaneously measuring inelastically scattered neutrons

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We present estimations and experimental studies of systematic effects in the neutron lifetime experiment carried out in 2008-2010 at ILL. Taking into account these corrections, we reduce the data of three independent measurements carried out with different energy spectra of ultracold neutrons at different temperatures to the averaged neutron lifetime value equal to $\text{xxx}(1.1)$ s.

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