

The neutron lifetime experiment τ SPECT

Wednesday 12 June 2024 09:50 (25 minutes)

The τ SPECT experiment, which has been developed at the pulsed Ultracold Neutron (UCN) source of the TRIGA Mainz research reactor and has been moved to the UCN source

at PSI in 2023, employs a fully magnetic trap for UCN and the novel technique of spin-flip loading to measure the lifetime of the free neutron.

The state of neutron lifetime measurement, τ SPECT's design and plans for a sub-second precision measurement in the next years will be presented.

Author: RIES, Dieter Achim

Presenter: RIES, Dieter Achim

Session Classification: Session 5