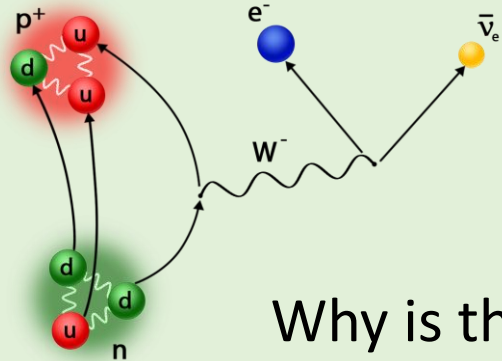


Measuring the free neutron lifetime with magnetic storage

Kim Ulrike Ross for the τ SPECT collaboration



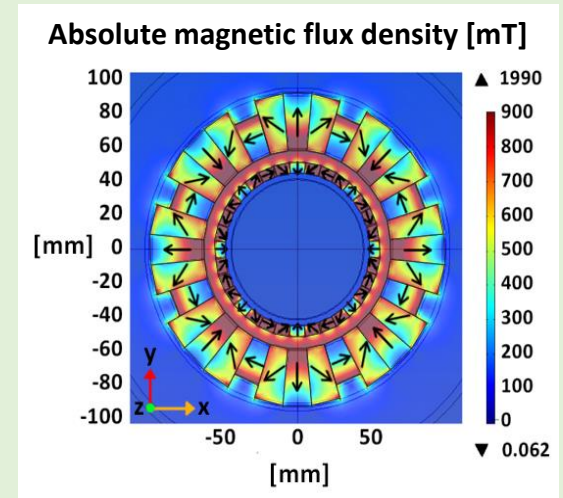
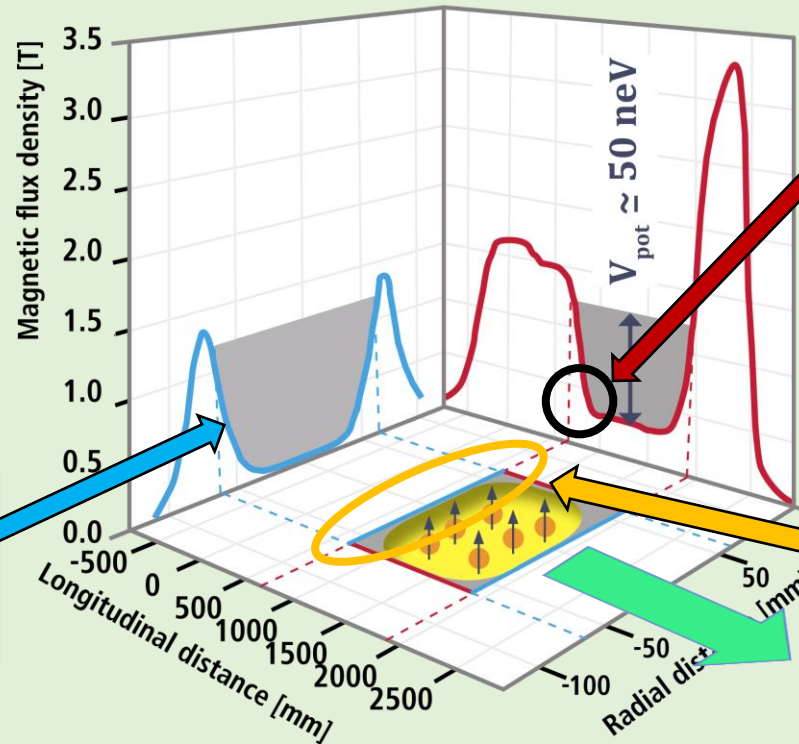
Why is the neutron lifetime important?



Spin flip for creation of low field seeking neutrons



Full magnetic storage of ultracold neutrons



Neutron spin flipping requires magnetic field compensation

n or p detection

Radial storage by permanent magnet

