

Agenda

of zoom meeting of ORNL-UTK-UKY-LU collaboration October 20, 2025

1. Yuri 5' Need to measure pressure in nTMM magnets
2. Alina 10' Fitting nTMM data update
3. Mubi 10' Transmission of Sapphire windows in McStas
4. Linus 10' KOMSOL simulations update
5. AOB

Things needed to proceed with for writing a new paper on n TMM

1. Remeasure that the pressure in two magnet vessels is the same
2. Conclude about the quality of magnetic shielding in experiment
 - * measurements with old mu-metal are completed – will be reported by Evan next time
 - * These (rather conservative) results will be used by Linus to calculate magnetic field in solenoids
 - * we are preparing boundary condition measurements for these calculations (Evan, Alina)
 - * model of the magnetic field will be used by Nathan for nTMM effect calculation
 - * mu metal similar to one used in experiment “new” is in UT shop (expected ready in 2-3 weeks)
3. In assumption that pressure and mag. field are perfect nTMM limit can be extracted (Alina - next talk)
4. Next in the analysis agenda will be interpretation of 2025 data without nTMM, but with presence of Δm , or mirror magnetic field B' , or any unknown potential forbidding $n \rightarrow n' \rightarrow n$ regeneration