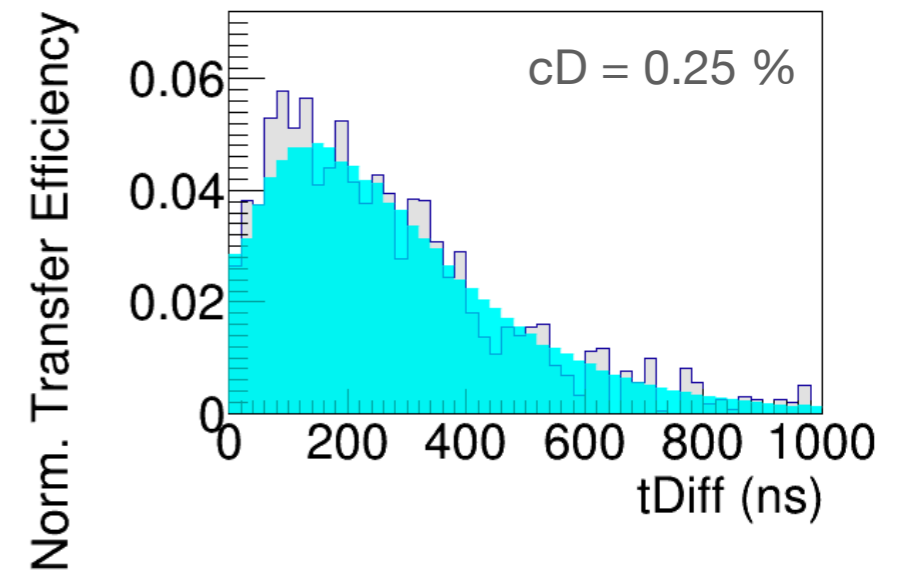
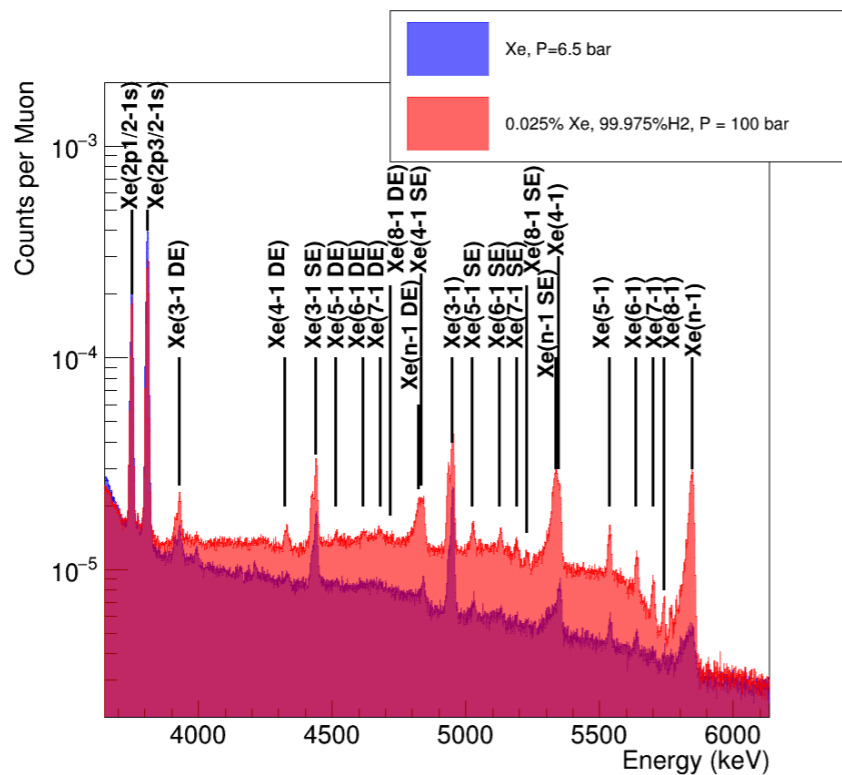
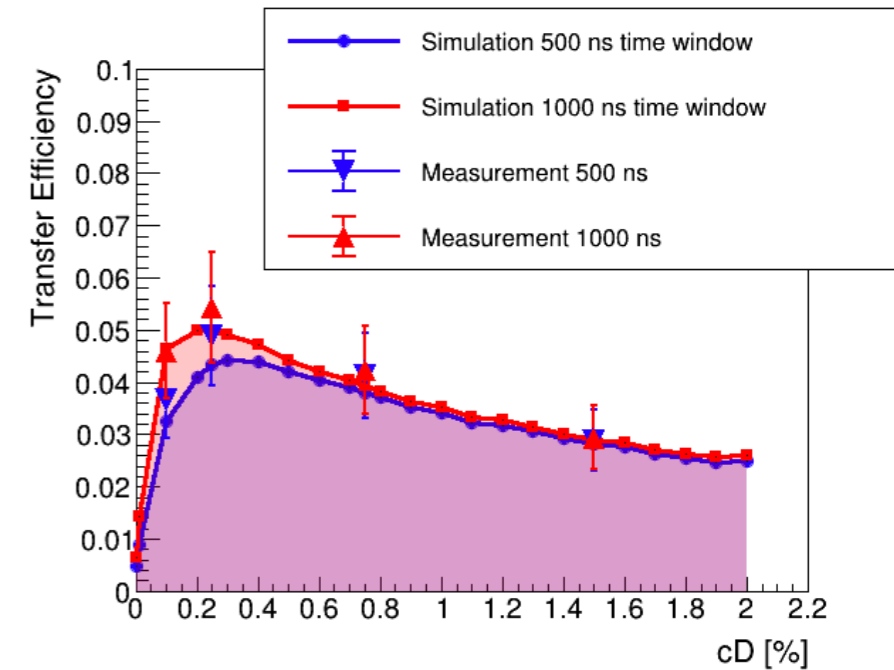

Varia & beam request

Andreas Knecht
Paul Scherrer Institute

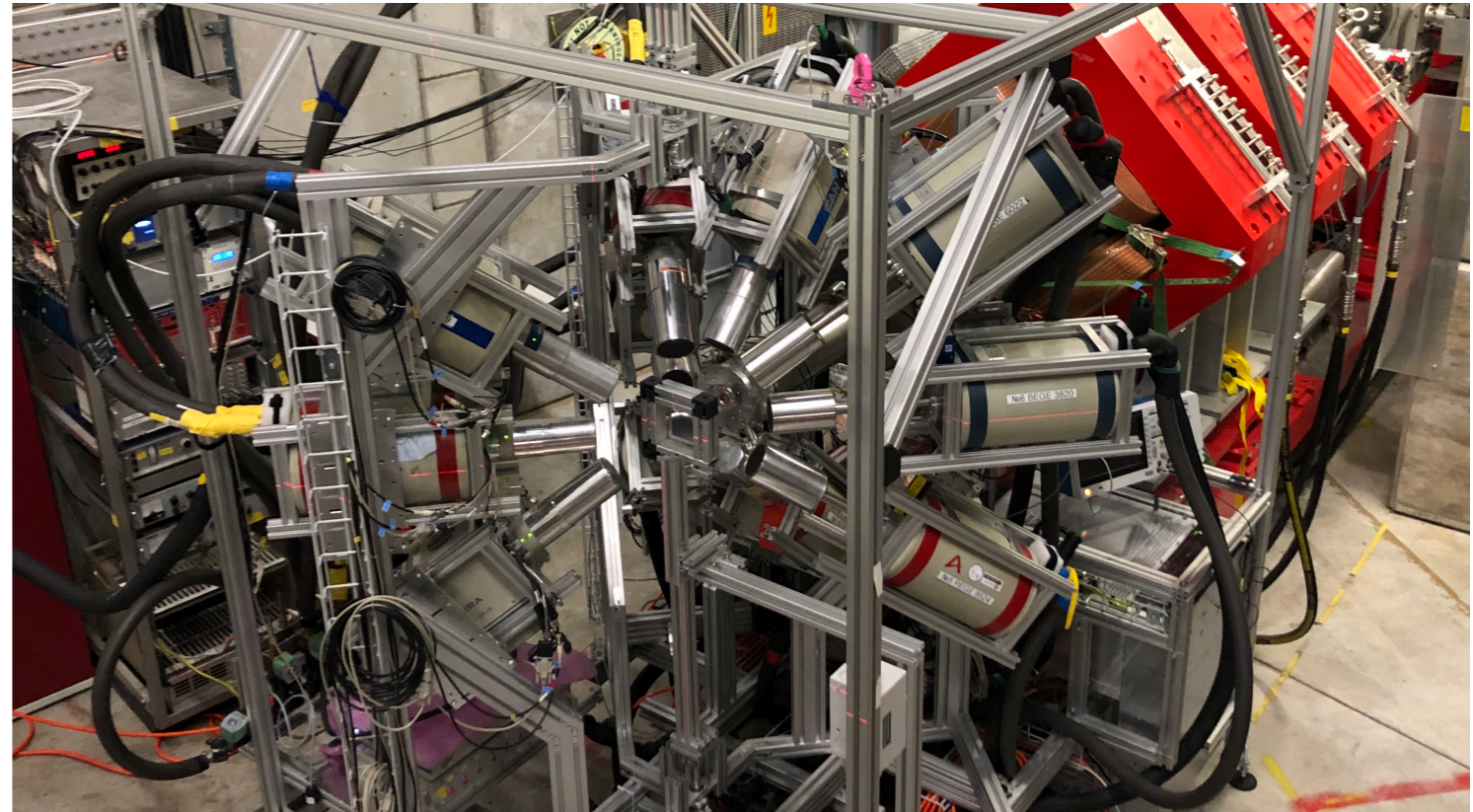
9. 12. 2021

- ▶ Two publications to be prepared in first half of 2022 based on Alex' thesis:
 - ▶ muX method paper including the comparisons of measurement/simulation
 - ▶ Muon transfer to argon, krypton, xenon



Germanium detectors for 2022

- ▶ Our MIXE colleagues at PSI have developed a nice frame to mount germanium detectors. Currently running with 11 detector.
- ▶ They also own 4 germanium detectors (2 BeGe, 2 co-ax) that we can use
- ▶ Additional detector options:
 - ▶ PSI 70% detector
 - ▶ Leuven Miniball cluster (still at PSI)
 - ▶ Leuven 75% detector?
 - ▶ PSI radiochemistry
 - ▶ Some detectors most likely available from our OMC4DBD colleagues



Other developments in 2022

- ▶ DAQ upgrade:
 - ▶ New racks
 - ▶ New frontend computer
 - ▶ Software developments: frontend, analyser, online display
 - ▶ Also interest (+ help) from MIXE and Muonium experiments

- ▶ Target making towards radium target (for 2023?):
 - ▶ To be discussed with radiochemistry groups @ Mainz/PSI beginning of next year

Beam request 2022

- ▶ Progress report currently under preparation; to be circulated early January. Deadline for submission of report and beam request January 10th.

- ▶ Combined with OMC4DBD & MIXE

- ▶ Aiming at autumn of 2022
 - ▶ Let me know if you have very strong time constraints in this period

- ▶ 3 weeks:
 - ▶ 1 week of setup, detector tuning, beam tuning, transfer optimisation
 - ▶ 2 weeks of measurements: various gold samples + low-Z

- ▶ MIXE will also request beam time at the beginning of the beam period. They offered, that one could test something for 1-2 days, if we have anything at that point.