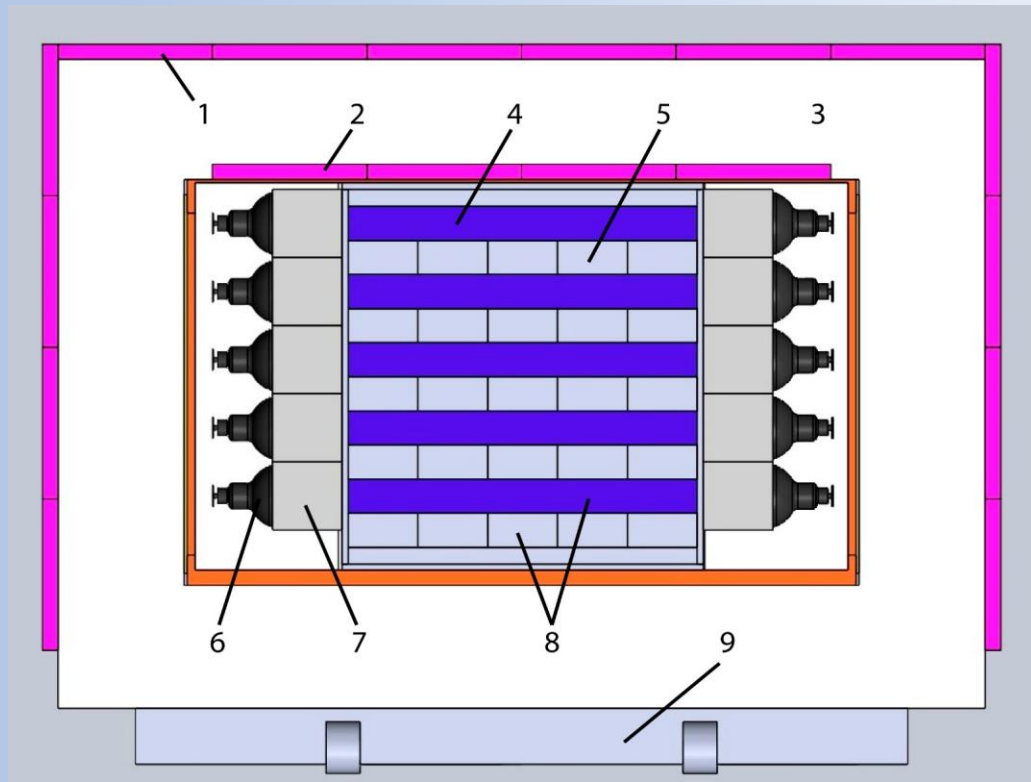
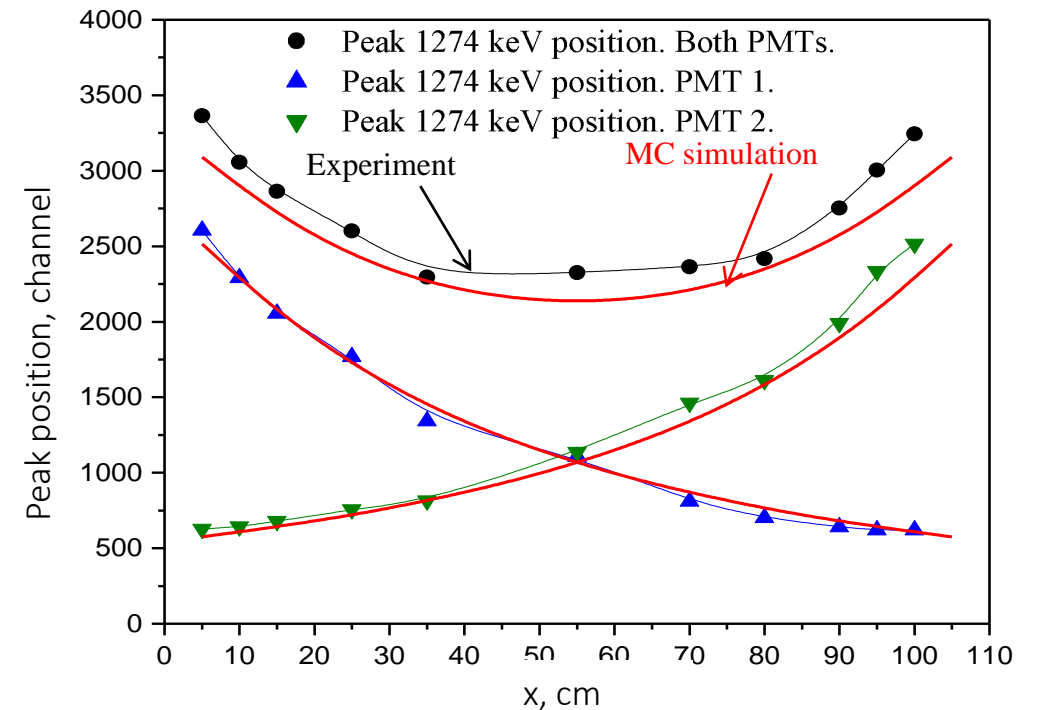
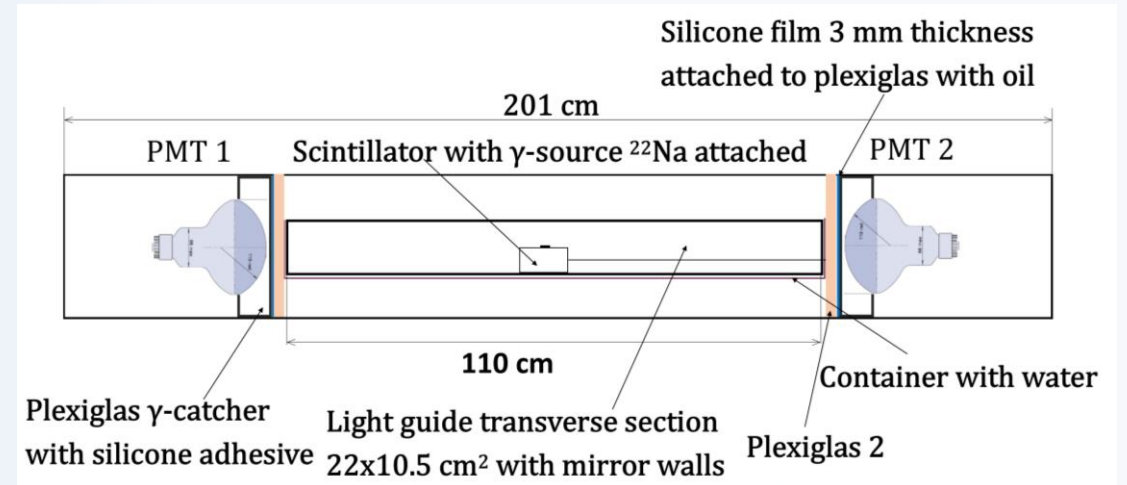


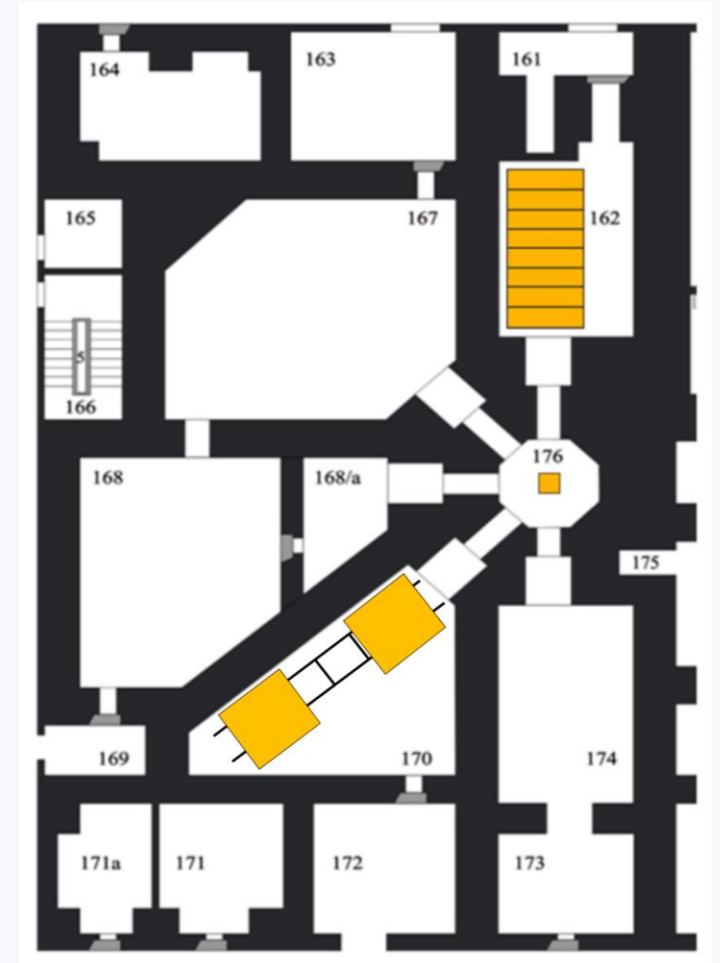
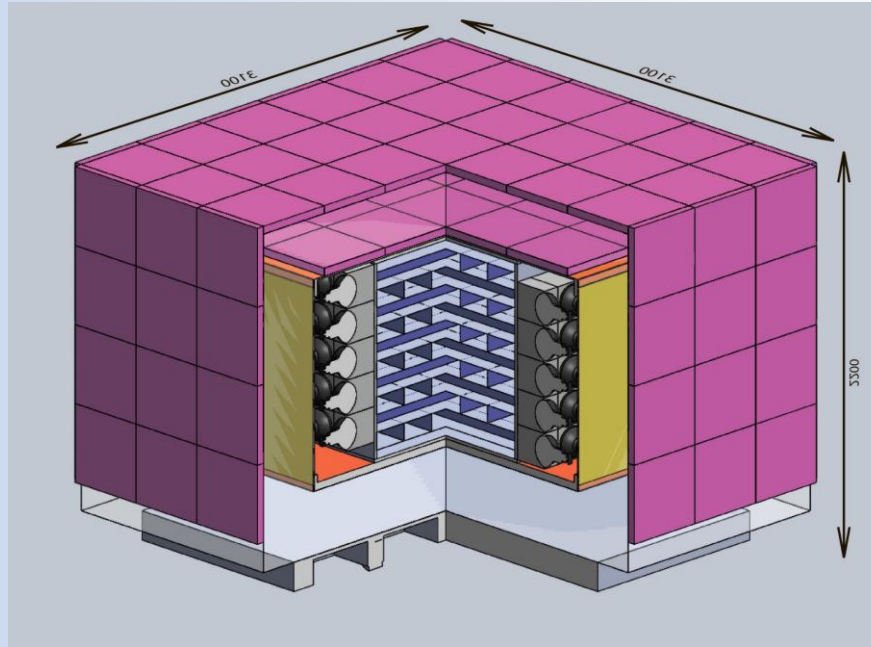
Neutrino-4 new detector design



1 - external AS, 2 - internal AS, 3 - CH₂B, 4 - transverse sections, 5 - longitudinal sections, 5 - PMT, 6 - gamma-catcher, 7 - scintillator, 8 - moveable platform



Expectations from new laboratory



Method	Factor	Relative error after 1 year of measurements with 2 detectors for each of 6 points
Initial value	--	15%
Gd concentration 0.5%	4x acc. bg. suppression	11%
3d sectioning	3x acc. bg. suppression	8%
Pulse form	5x corr. bg. suppression	6%
Efficiency	2x count rate	3%

- Baseline 6-14m
- Two identical detectors
- Cell structure
- Better energy resolution
- PSD capability