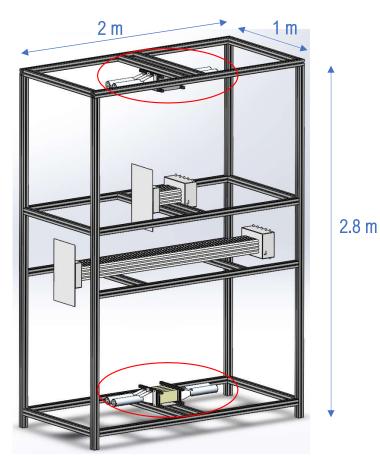
ATLAS sMDT setup at GIF++

Oliver Kortner Elena Voevodina Gregor Eberwein 09.07.2020





Planned experimental setup – dimensions and properties





Scintillators (red):

- Positioning at floor level and ~2.8m height (can be increased if necessary)
- Shielding necessary, but other setups will not be affected due to positioning

Test Chambers:

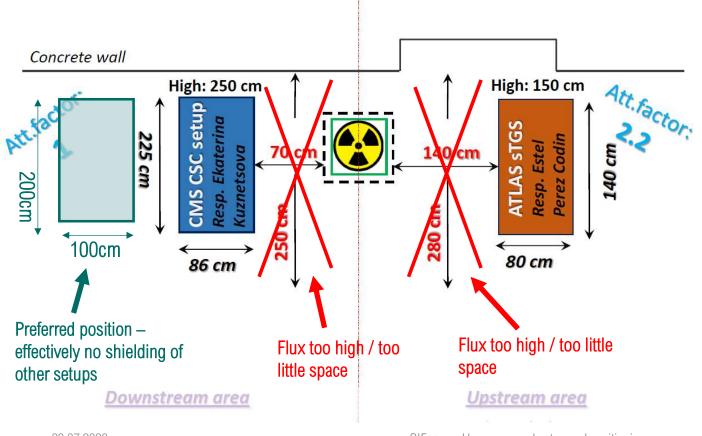
- Effective shielding: Tubes: 12x 0.8mm = ~1cm aluminium
- Minimal reduction of gamma flux
- Positioning at ~irradiator height

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GIF++ weekly – proposed setup and positioning



Current situation at the GIF++ facility and proposed positioning - Top down view



Proposed positioning

Preferred position is **behind the CSC setup in the downstream** area:

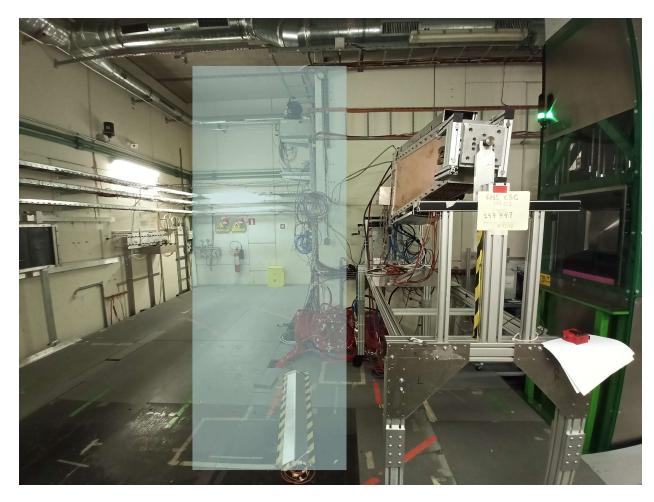
- Effectively no shielding of other setups
 behind us (positions of scintillator and very little chamber material of 1cm aluminium)
- Other available positions have too tight space constraints and an estimated too big counting rate for the long test chamber

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GIF++ weekly – proposed setup and positioning



Position behind CSC at GIF++



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GIF++ weekly – proposed setup and positioning



Required adjustments / services at the GIF++ bunker and requested time frame



sMDT gas piping needs to be adjusted

HV/LV and trigger RO cables already in place

Quantity of cables will be double - checked, but is assumed to be enough

Requested time frame: October 2020 – December 2021



Installation planned for (mid) September 2020

09.07.2020