

Updates on SAND geometry

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You Inst Logo

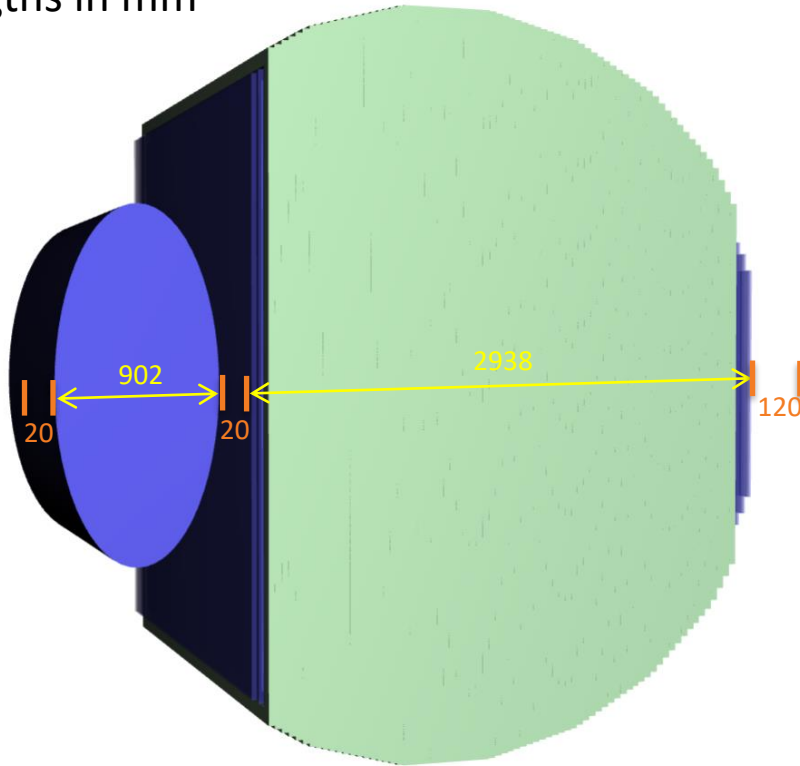


Motivation

- **GRAIN dimensions** have been updated following the foreseen prototype
- A realist geometry simulation needs to account for engineering requirements about **clearances** between GRAIN, STT and ECAL
- STT design left untouched, but number of modules changed

Updated geometry

All lengths in mm



UPDATES:

- GRAIN size along z
- 20 mm clearance GRAIN-ECAL and GRAIN-STT
- 120 mm clearance STT-ECAL downstream to account for STT supporting structure

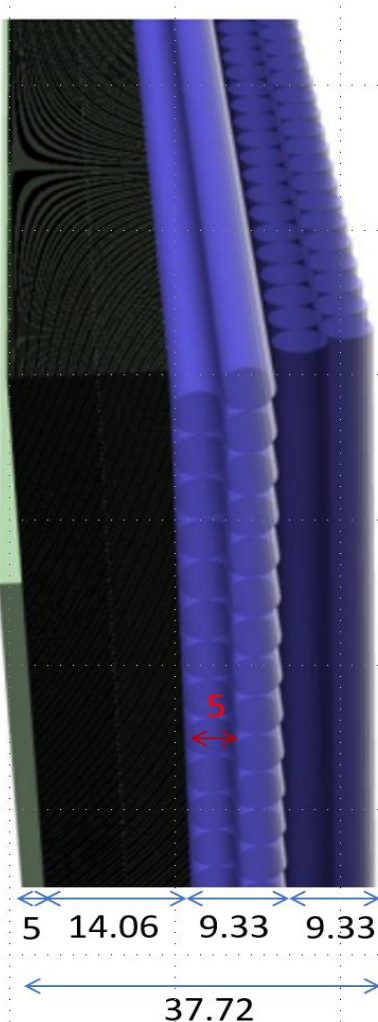
	# C3H6	# C	# Traking	Mass C3H6	Mass C	Mass Radiator	gas	TOT
STT	65	8	6	3.1 t	0.7 t	1.3 t	0.1 t	5.2 t

Software Updates

- Changes have been merged with the master branch with no conflicts
- No overlaps in the new geometry
- Generate Comprehensive ND geometry: `./build_hall.sh sand_opt1_STT1`

backup

C3H6 STT module dimensions



- 3 modules less than the previous design
- 3 C3H6 modules -> 11.31 cm