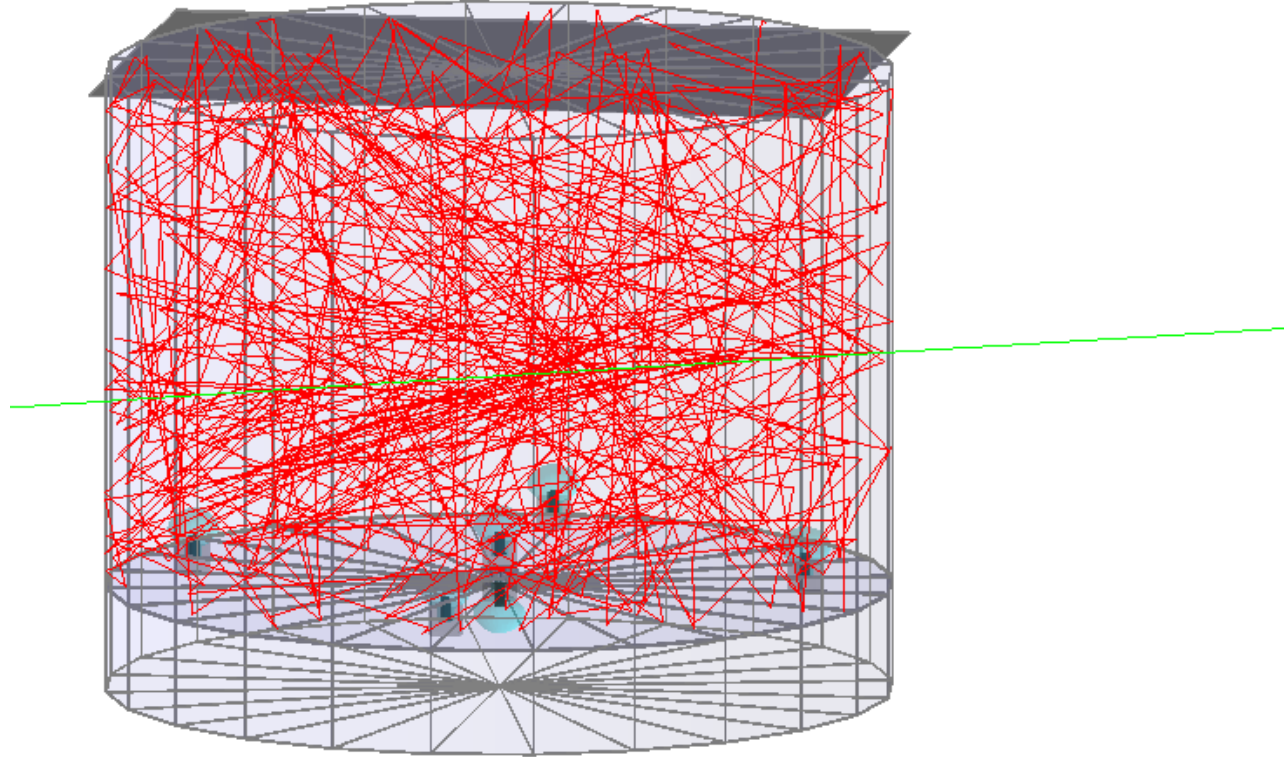


# SWGGO Framework with RPC

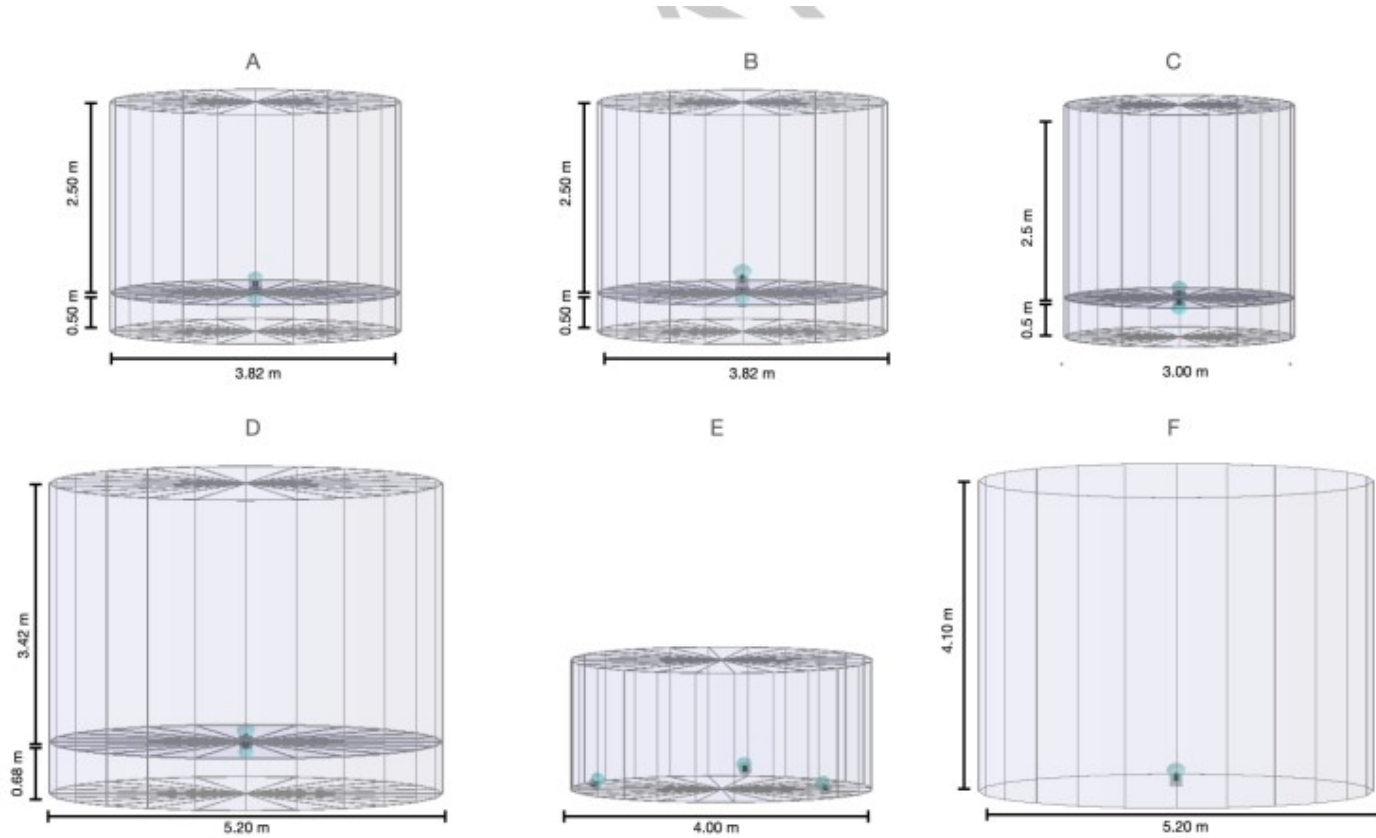
Fernanda Heredia, Claudio Casentini, Gonzalo Rodriguez

Dimensions: 382 cm x 382 cm



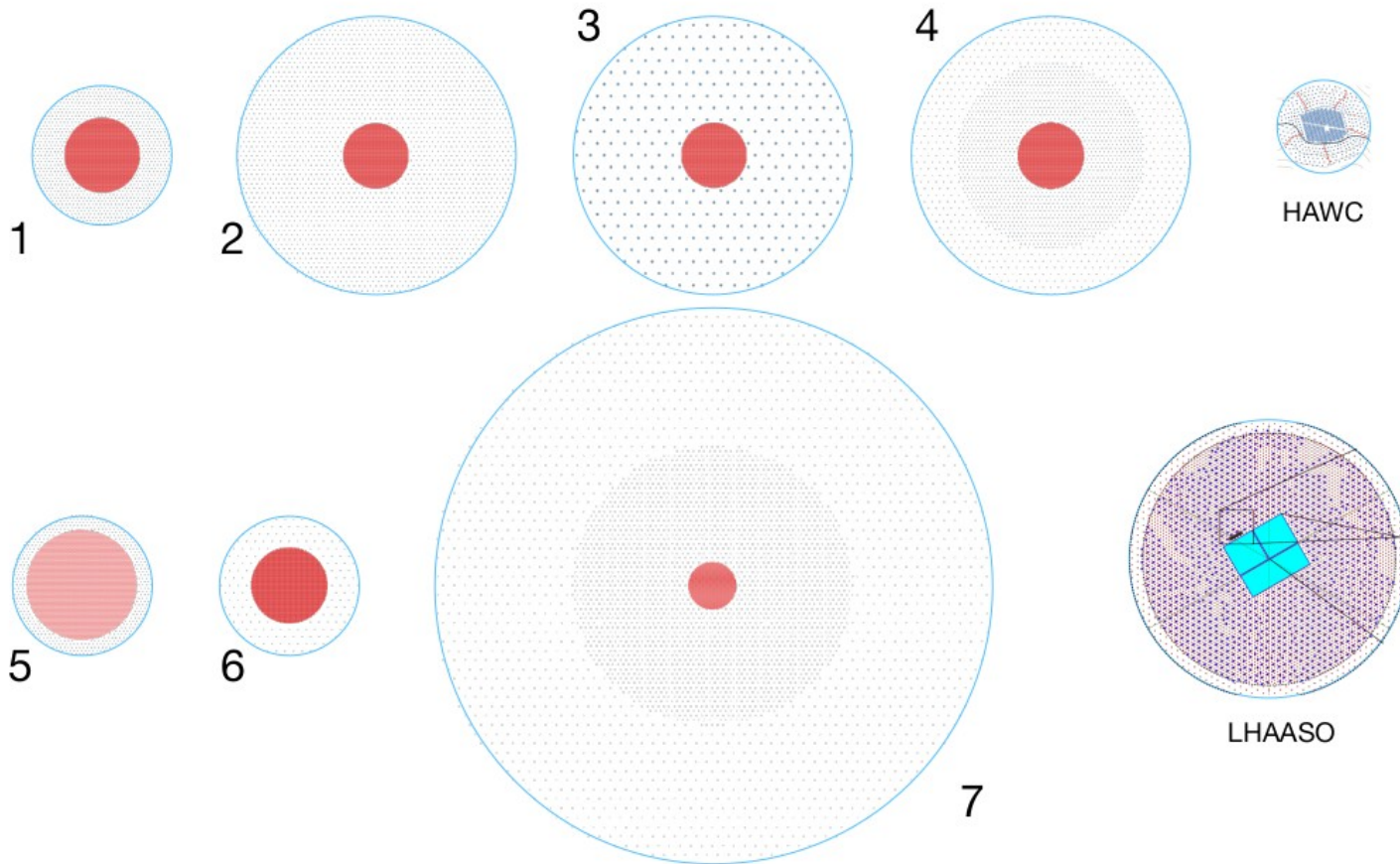
# SWGGO Framework with RPC

Detector stations



# SWGGO Framework with RPC

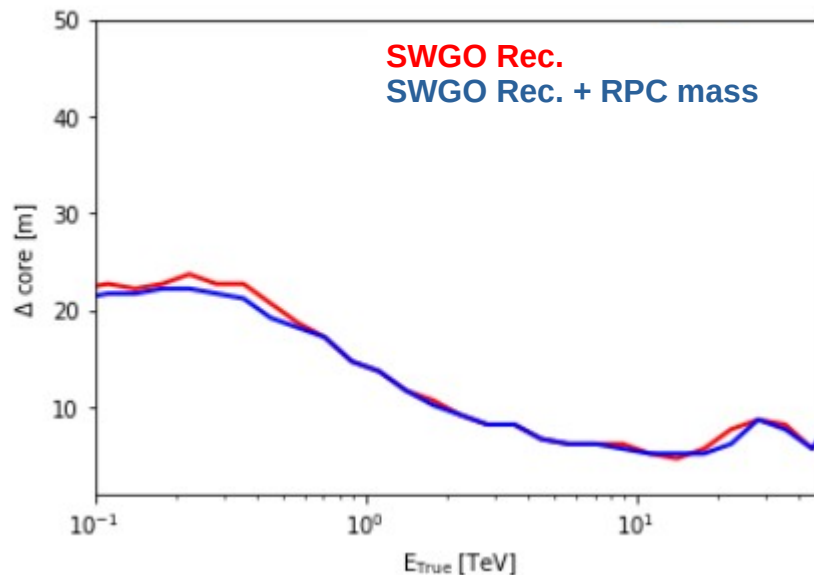
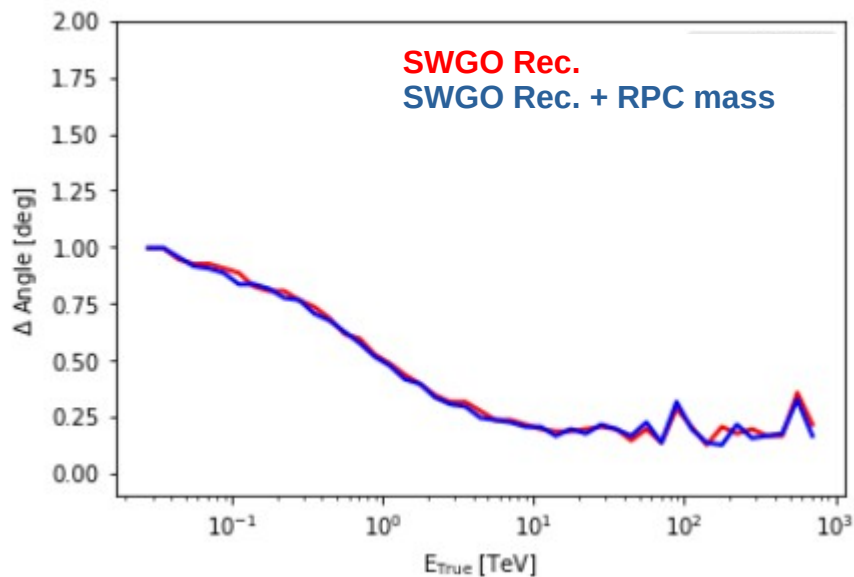
Detector layout



# SWGGO Framework with RPC

Config.	Zone 1			Zone 2			Zone 3		
	FF(%)	Radius (m)	Units	FF(%)	Radius (m)	Units	FF(%)	Radius (m)	Units
A1	80	160	5731	5	300	858			
B1	80	131	3865	5	300	984			
C1	80	137	6829	5	300	1542			
D1	80	166	3367	5	300	438			
E1	80	150	4639	5	300	822			
F1	80	188	4303	5	300	378			
A2	80	138	4303	2.5	600	2328			
A3	80	138	4303	2.5*	600	2520			
A4	80	140	4429	4.0	400	1518	1.25	600	678
A5	40	234	6109	5.0	300	432			
A6	88	162	6469	1.0	300	168			
A7	80	101	2335	2.5	600	2394	0.63	1200	1842
E4	80	140	3403	4.0	400	1428	1.25	600	624

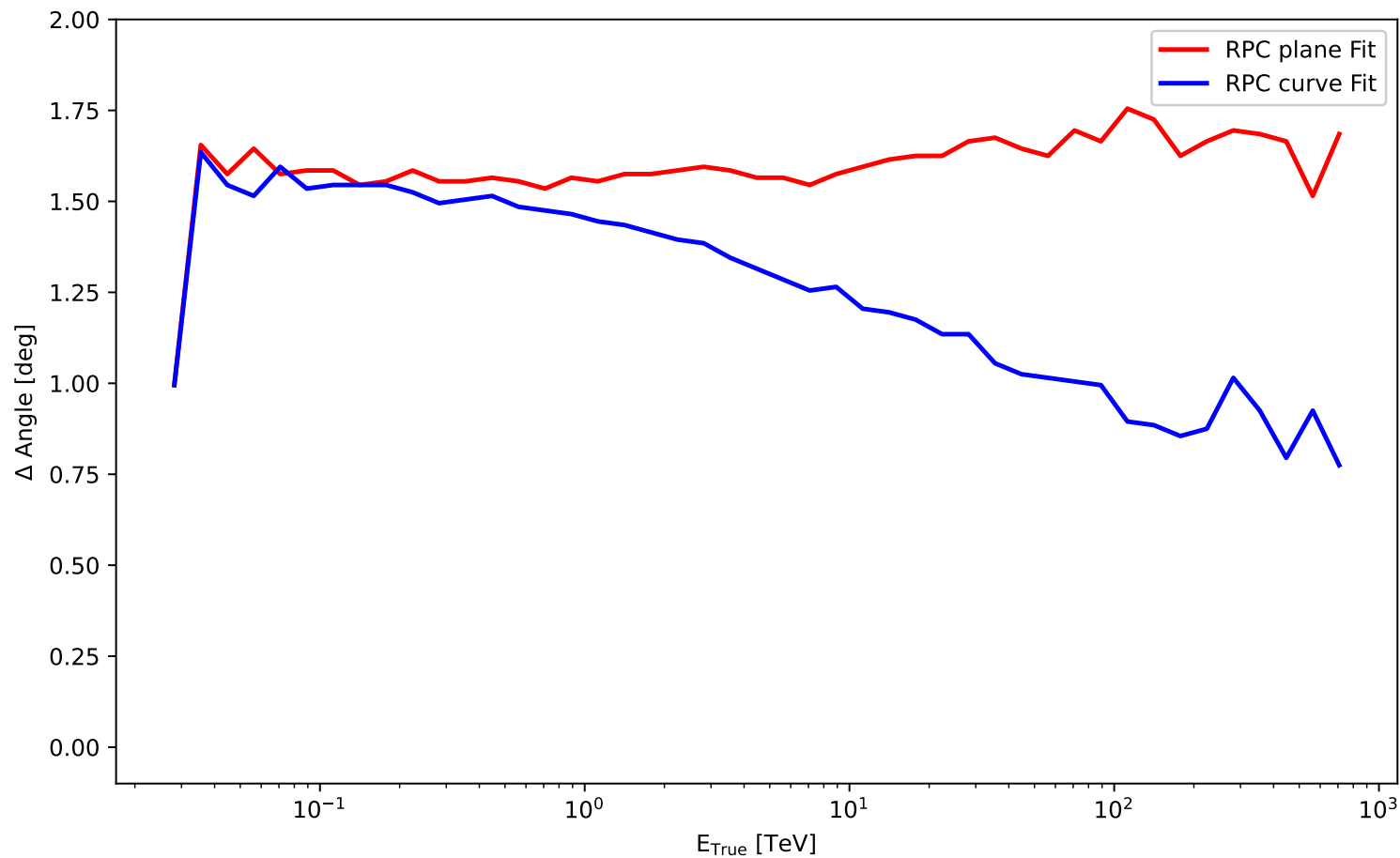
# SWGGO Reconstruction with RPC mass:



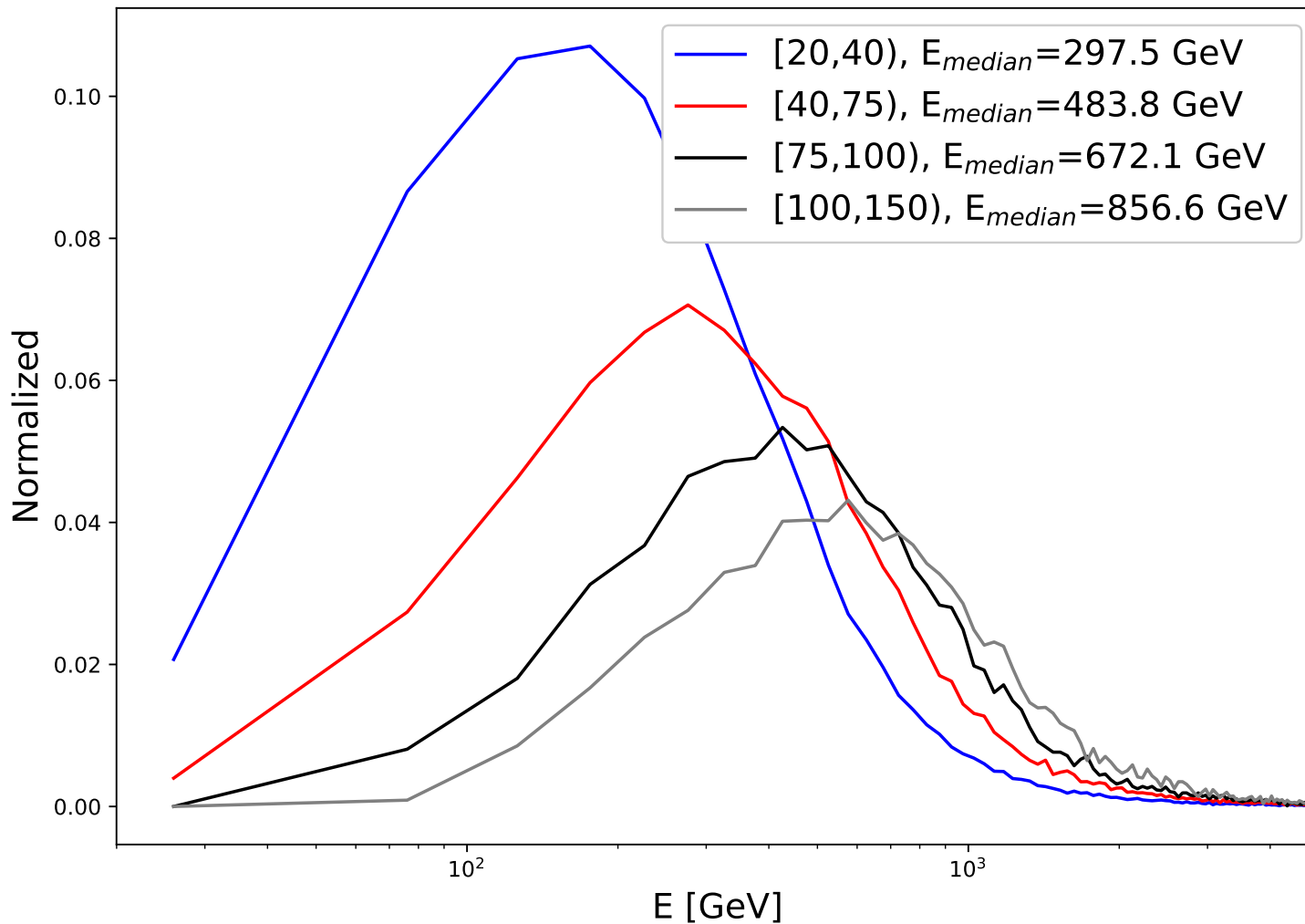
## CUTS:

- Number of hits tank > 25
- Status angular rec == True
- Status energy rec == True
- Rec. Energy > 0
- Core within dense array

# RPC Angular Reconstruction:



# RPC number of Hits distribution:



# SWGGO Framework with RPC

## STATUS:

- RPC as part of the Genat4 framework
- Double layer cylindrical tank with RPC as reference
- A1 array layout as reference for simulation and reconstruction.
- Python scripts to reproduces SWGO performance
- RPC angular reconstruction DONE → needs to optimize.
- merge files SWGO and RPC reconstruction (ASCII)
- READY to study the RPC detector performance

Dimensions: 382 cm x 382 cm

