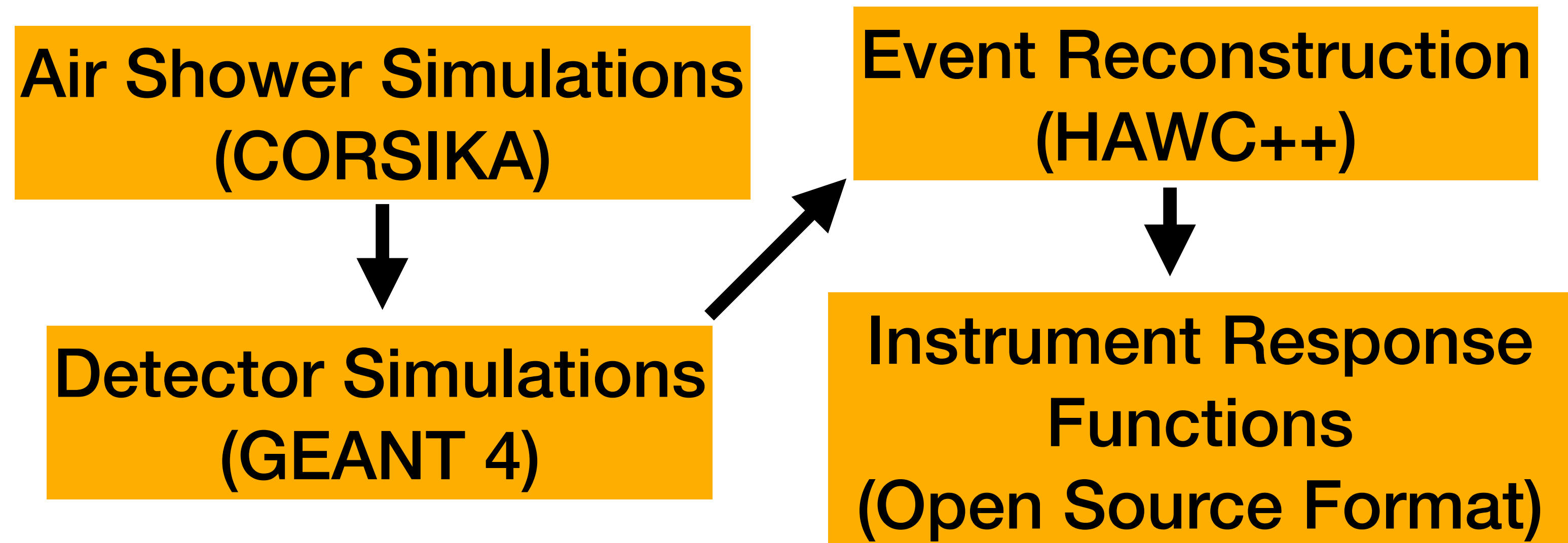


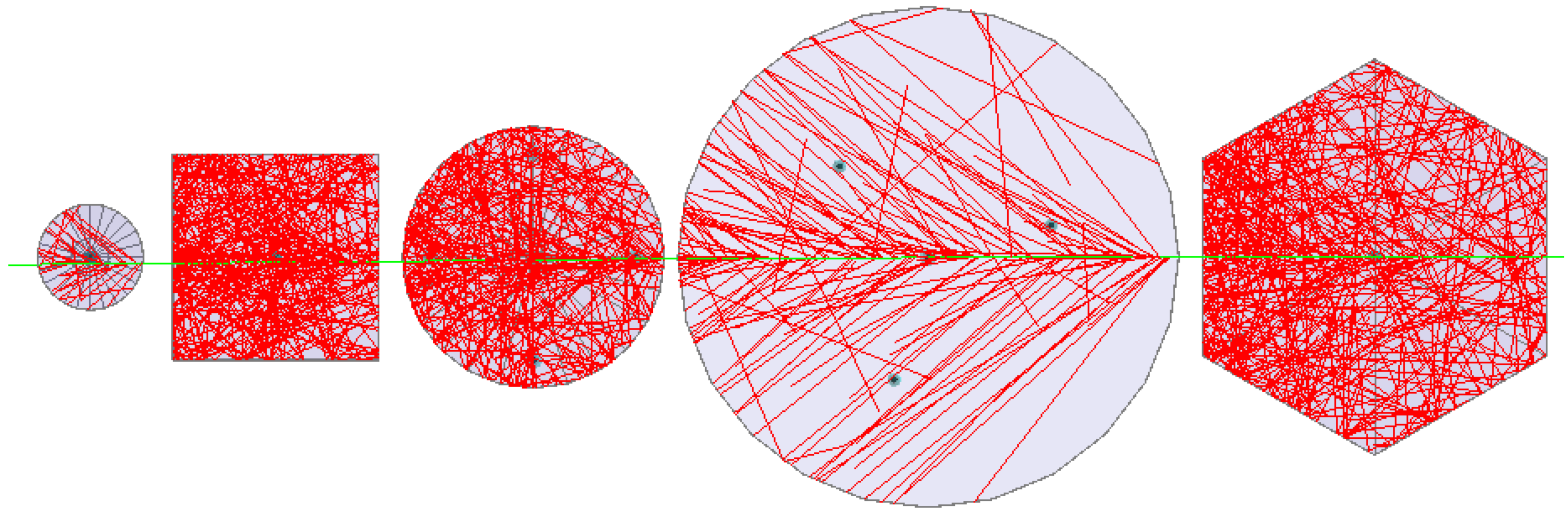
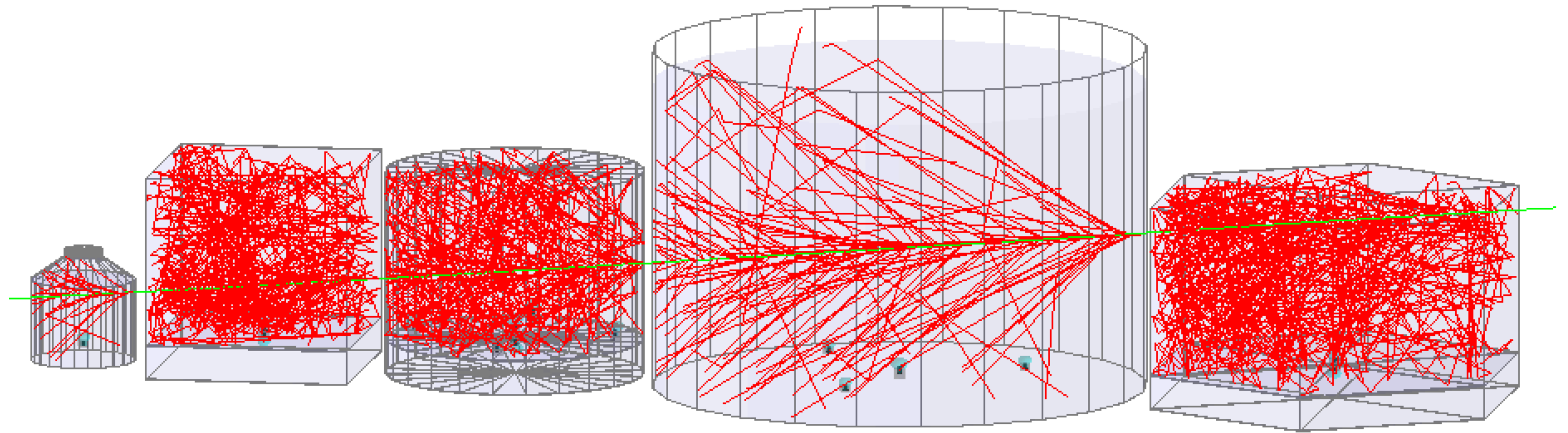
Simulating the performance of the Southern Wide-view Gamma- ray Observatory

Harm Schoorlemmer - for the SWGO collaboration

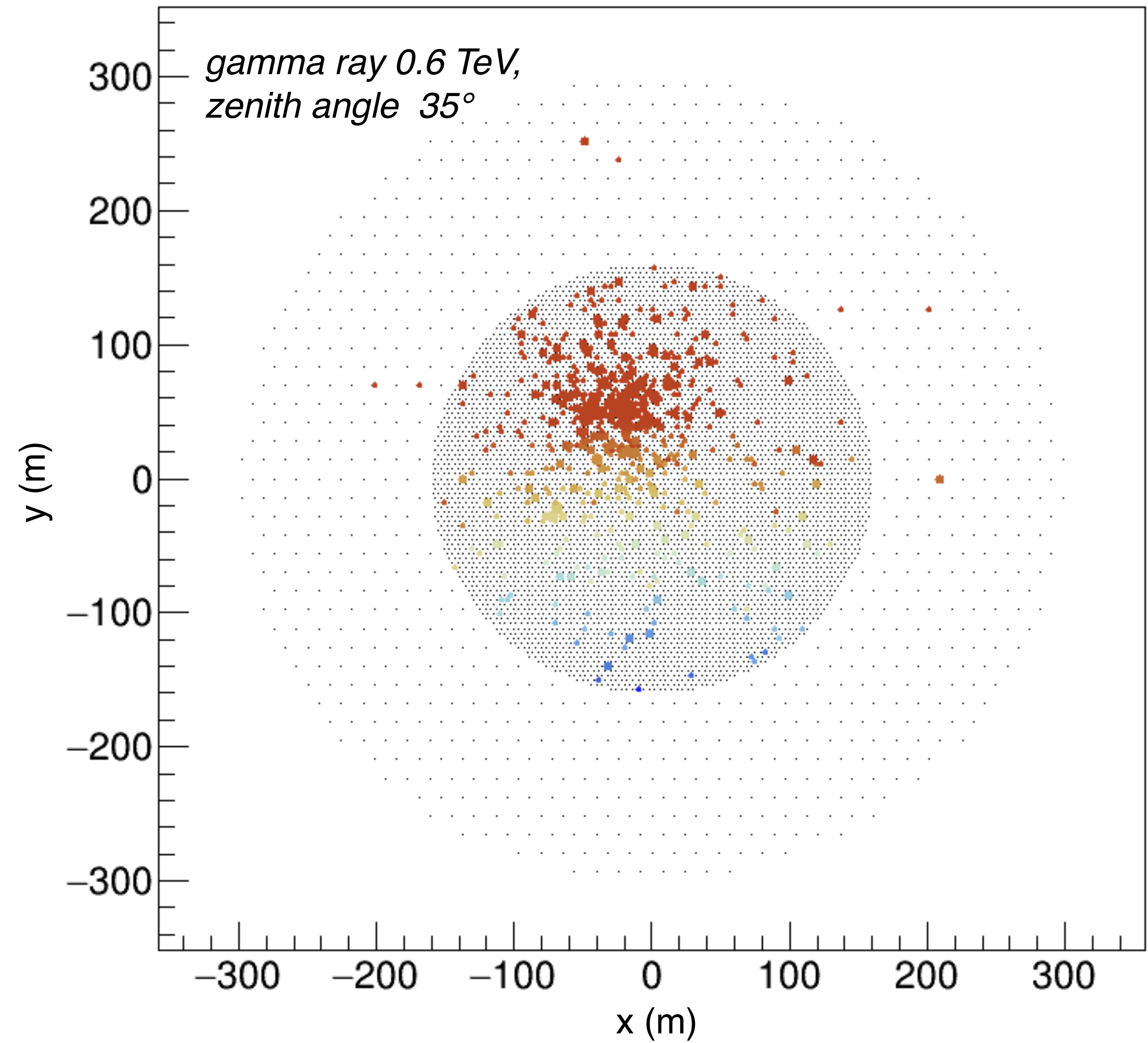
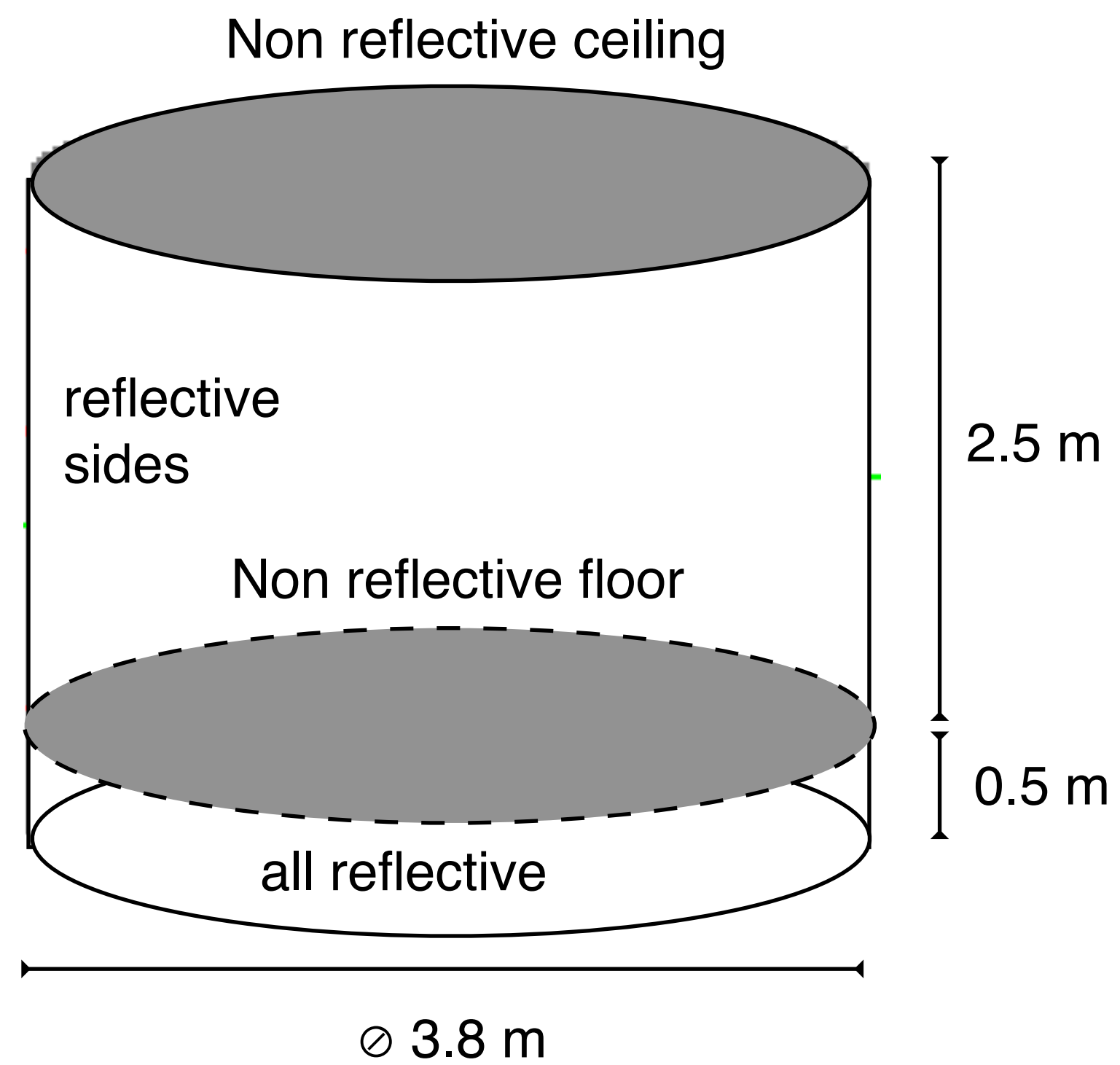


A Sketch of the framework





A starting point....



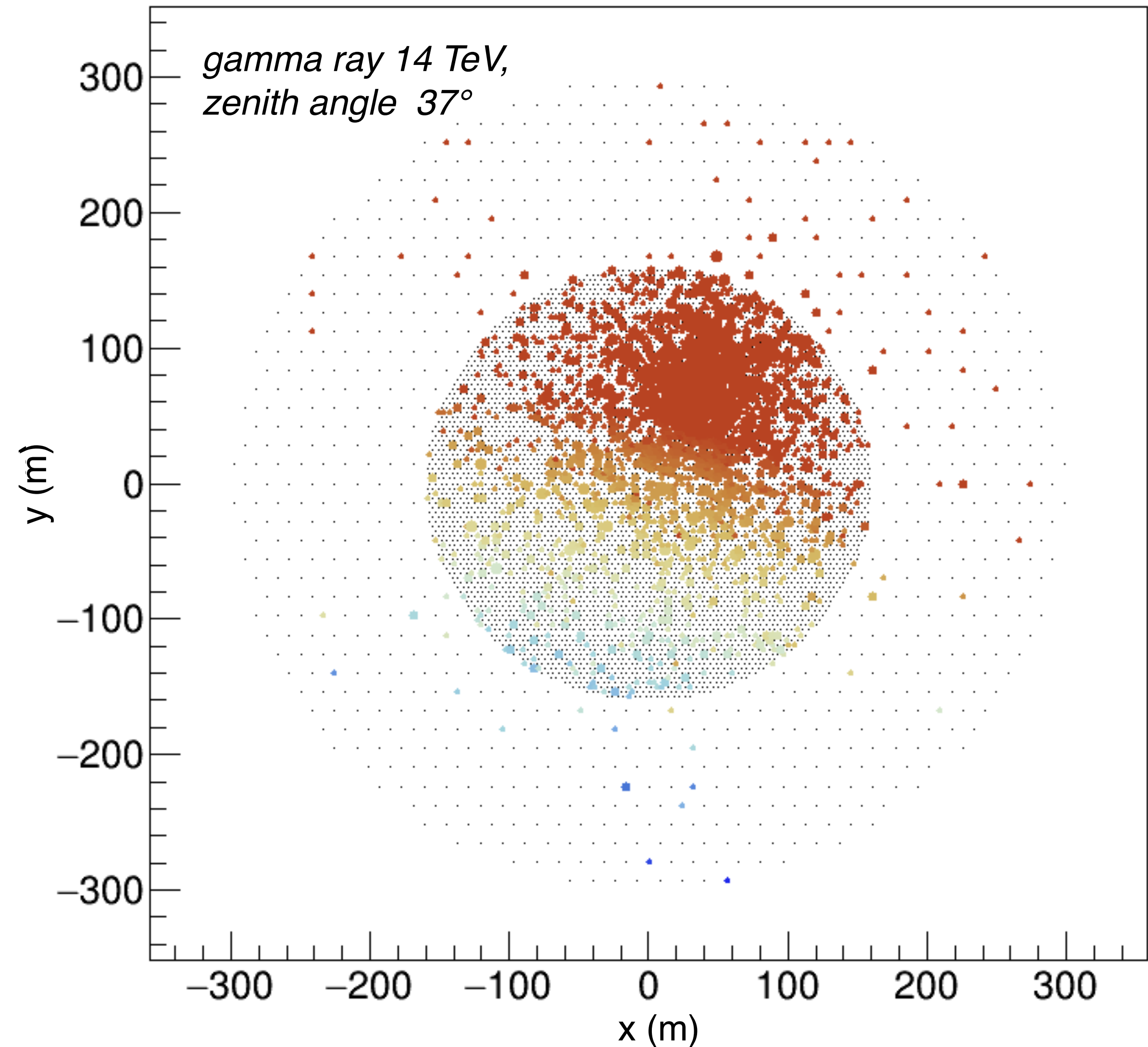
A starting point....

- Dense inner array:
80% filled, \varnothing 320 m
- Sparse outer array:
5% filled, \varnothing 600 m
- Total number of
identical detector units:
6600

Development of full simulation chain

Reference point for evaluation
of the science benchmarks

Development of cost model



Strategy

Use total cost of reference design as a constraint on other design options

Explore impact of design options on science benchmarks in coming year

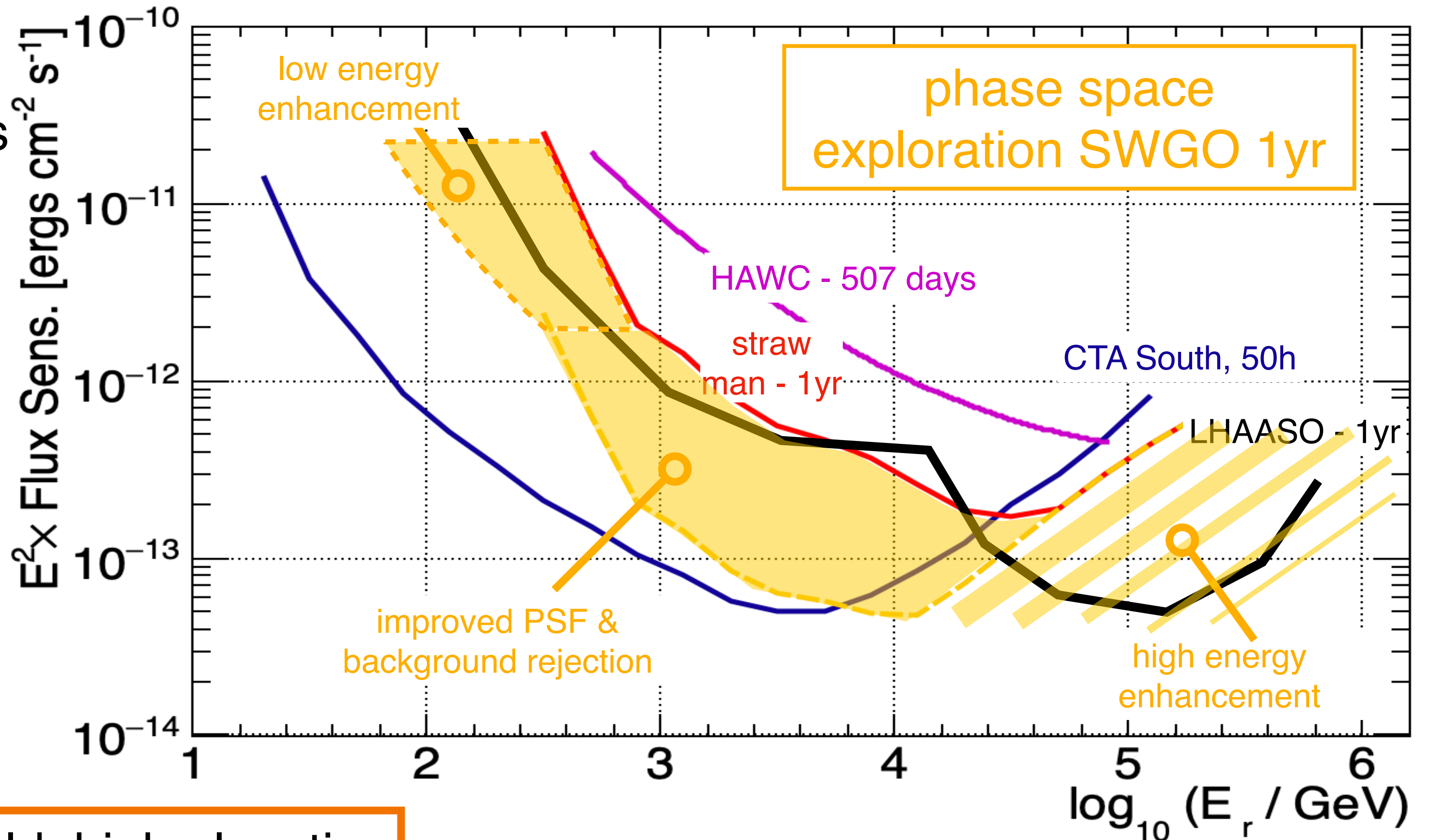
What are we going to explore...

Low-energy (< 1 TeV): low unit threshold, high elevation

Mid-energy (1 - 50 TeV): dedicated muon tagging, compact unit design

High-energy (50 - X PeV): large efficient outer array

Differential point-source sensitivity



Low-energy (< 1 TeV): low unit threshold, high elevation

Mid-energy (1 - 50 TeV): dedicated muon tagging, compact unit design

High-energy (50 - X PeV): large efficient outer array



The Southern Wide-field
Gamma-ray Observatory

www.swgo.org