



Geant Simulation Detector Construction

S. Paganis, A. Psallidas, L. Tzu-Lu
National Taiwan University (NTU)

BT2015 Analysis meeting
7 January 2016

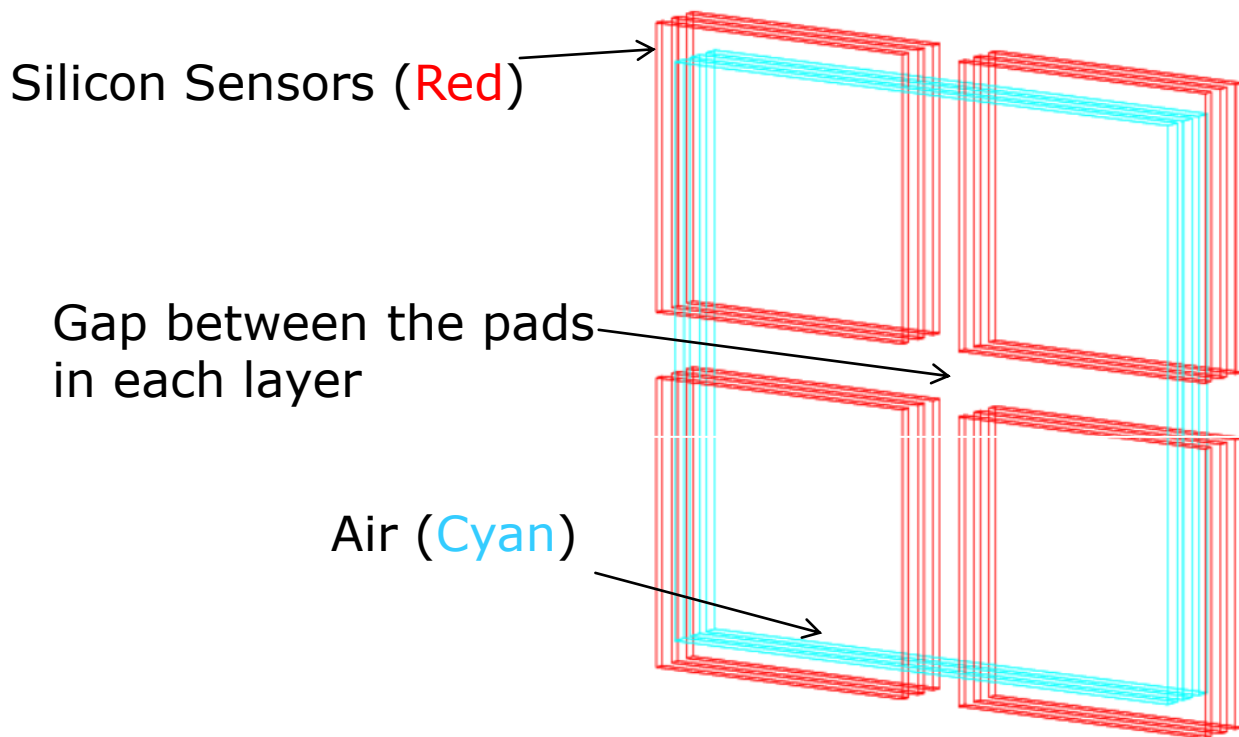


Set up the detector

- ❑ This is a first sketch of the detector setup using the Geant Visualization tools in order to discuss, do all the necessary comments and make adjustments to construct correctly all material elements.
- ❑ We work in Ixplus after setting the environment.
- ❑ For technical instructions, see and run the code, look in git here: <https://github.com/apsallid/SiWEcal>
- ❑ We have check the visualization in Scientific Linux 6 and windows 10 using putty and xming but in case you have a problem (e.g in Ubuntu) an .eps file is created.
- ❑ All dimensions are random with main goal to better visualize volumes. Correct dimensions will be added in a second step and cross checked.

Visualization: Silicon sensors (3 layers)

- One Layer = 2x2 array of Si pad sensors. So there is a gap between the pads. 3 layers are shown here with air between the Silicon sensors.



Visualization: Full detector side view

- Looking the detector from the side:
3 layers: (W-Si-PCB-Al-Air)x3
- Other materials/volumes can easily
be added in: `src/DetectorConstruction.cc`
- Will add all configurations in an enum
in `include/DetectorConstruction.hh`

