

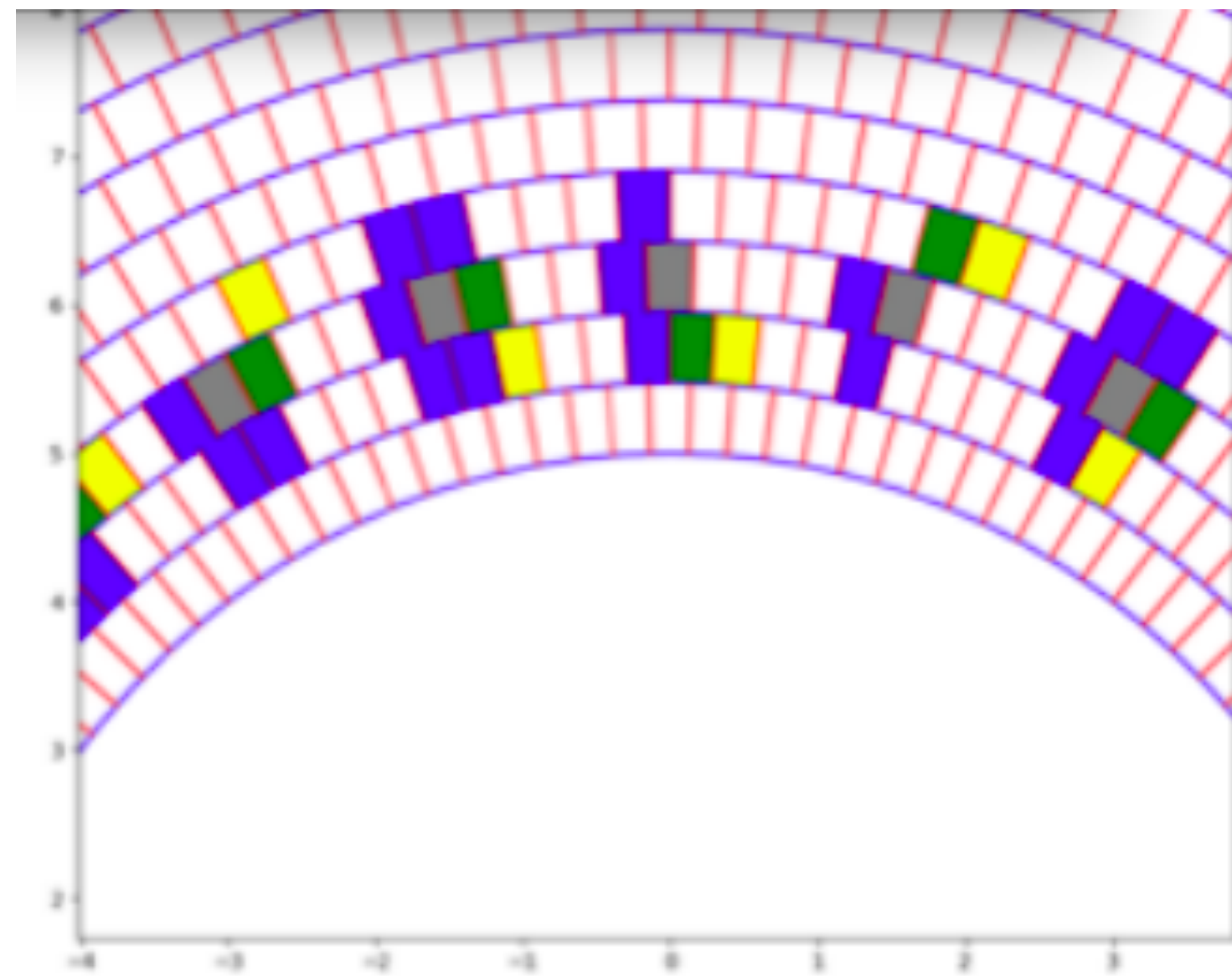
Tracking meeting update

26/09/2023 and 03/10/2023

Aruni Nadeeshani

Minutes on 26/09/2023

- Present : Dipangkar, Aruni, Carlos, Shujie
- Aruni Discussed the next hit definition improvements from Steve's code. He used mtpcroards.py script to define next possible hit and this used for his own inputs. The GEANT4 digitized input select next possible hit pad as neighboring pad.



Yellow and green pads are last two pad hit.

Grey is current hit

Blue are possible next hit

BONuS12 tracking: The specific criteria for defining close proximity in terms of

ϕ (8 degrees or 4 pad widths), z (19 mm or nearly 5 pad lengths)

From 07/04/2020 update

- Dipangkar and Carlos Discussed about the new proposed low field 1.5 Tmagnetic field simulations. We need to process this simulation to check the effects on background and tracking efficiency.
- Dipangkar and Carlos talked about generating the realistic data set with two TDIS models.

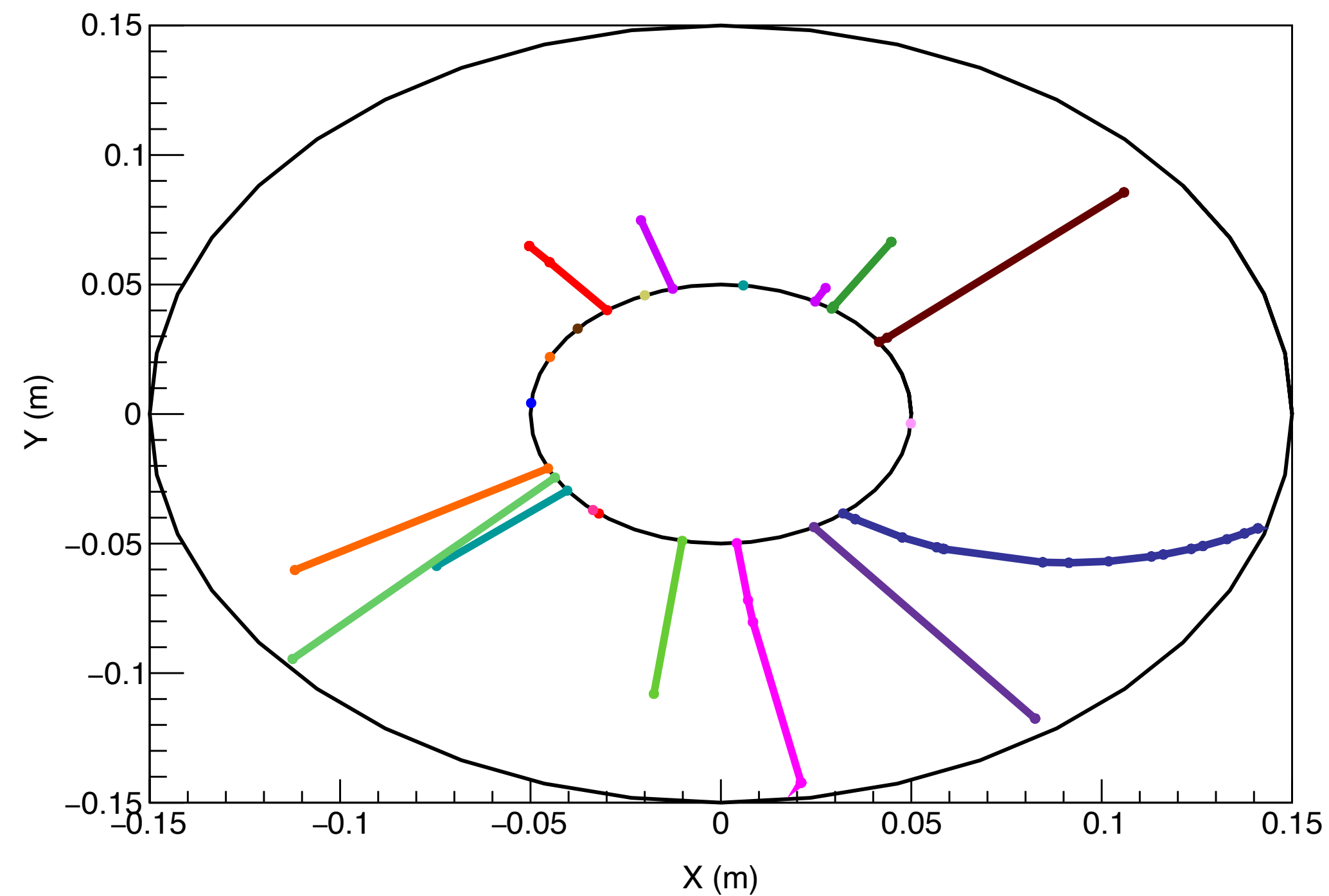
Minutes on 03/10/2023

- Present : Dipangkar, Aruni, Carlos, Shujie, Steve, Eric Fuchey
- Aruni and Steve discussed the next hit definition improvements from Steve's code. He used `mtpcroards.py` script to define next possible hit and this used for his own inputs. The GEANT4 digitized input select next possible hit pad as neighboring pad.
- Steve and Eric Fuchey discussed possible simulations for 1.5 T magnetic field.
- Dipagkar and his student tried gnn tracking scripts. Now data sets are available and they are trying to run the code.

Event display

- Checked the root files in /work/TDIS/4Rachel/ folder to see the data set is realistic or not.

mTPC - Hits/Chains XY



Event display out put for 10 events