

Hit-multiplicity correlation study

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Module / data usage



Module handles RawHit level

Eg) INTT -> InttRawHit used

Data file used : Combined raw DST produced through auto-production

Run 50343 (extended readout)

/sphenix/lustre01/sphnxpro/physics/slurp/streaming/physics/

And also

InttRawHitContainer / MicromegasHitContainer / MvtxRawHitContainer ..

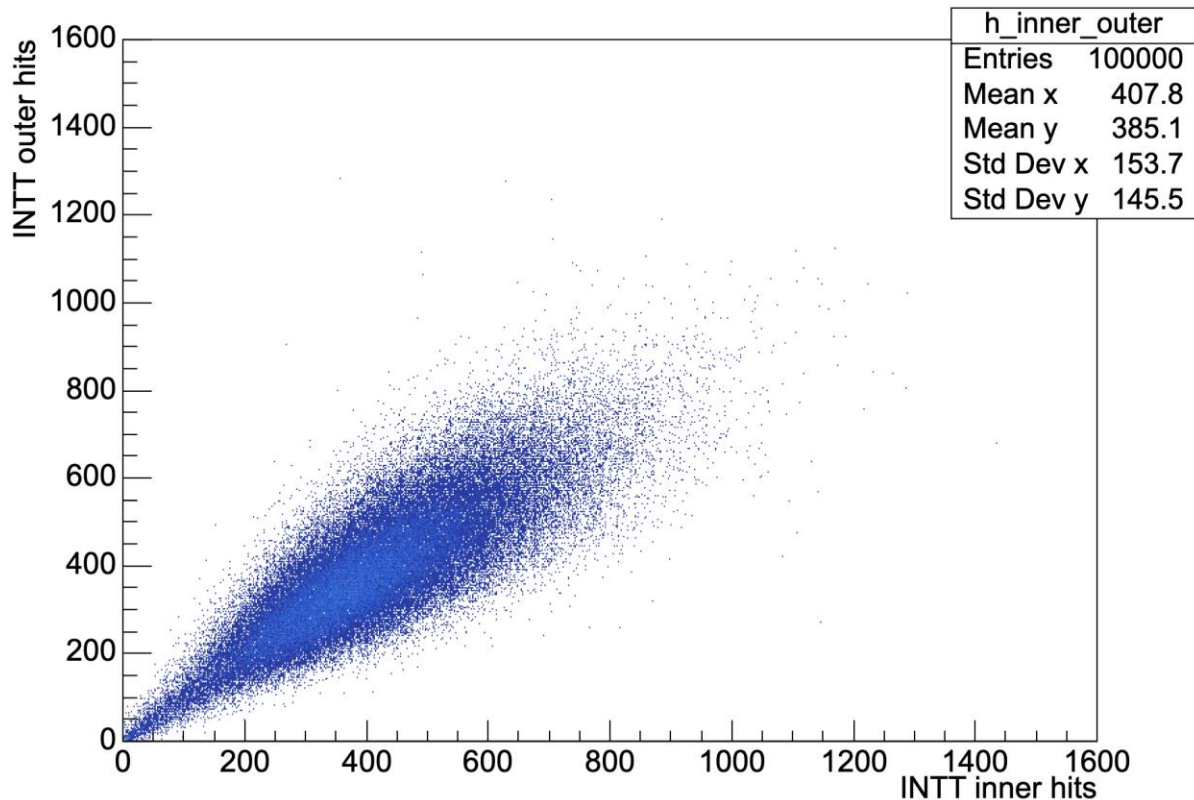
Every plot processed after event combining without any hot channel masking, detail bco matching.

Hit-Multiplicity INTT only(1)



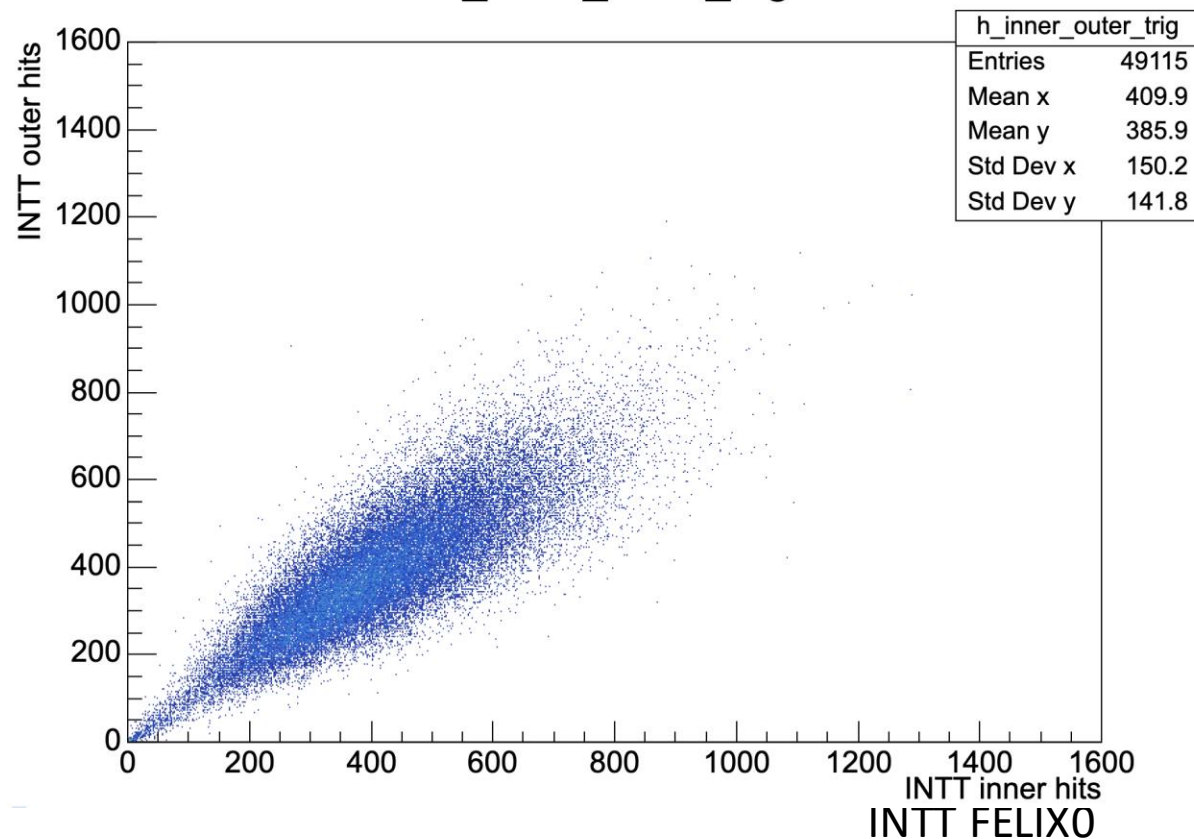
Run 50343

h_inner_outer



Run 50343

h_inner_outer_trig



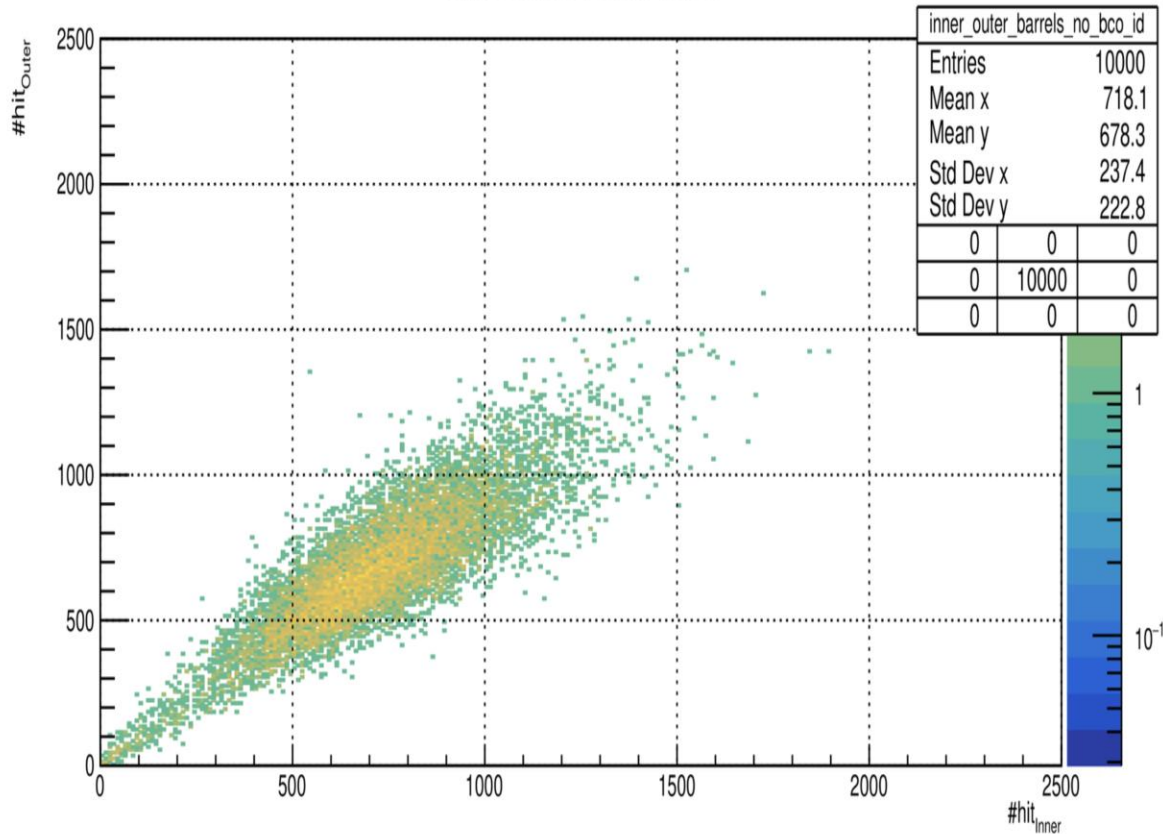
MBD Trigger(vtx<10) Required

Hit-Multiplicity INTT only comparison with Genki(2)

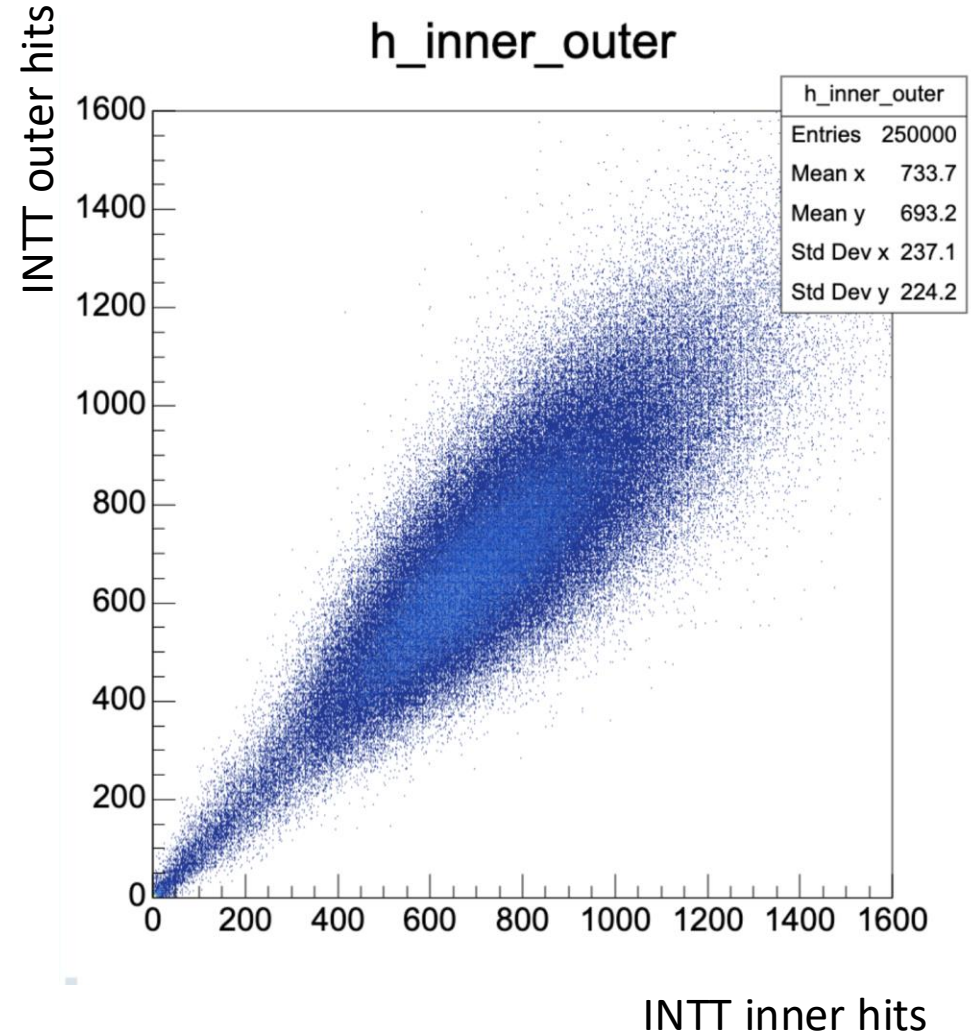


Run 49737

Inner barrel vs Outer barrel



Run 49737
h_inner_outer

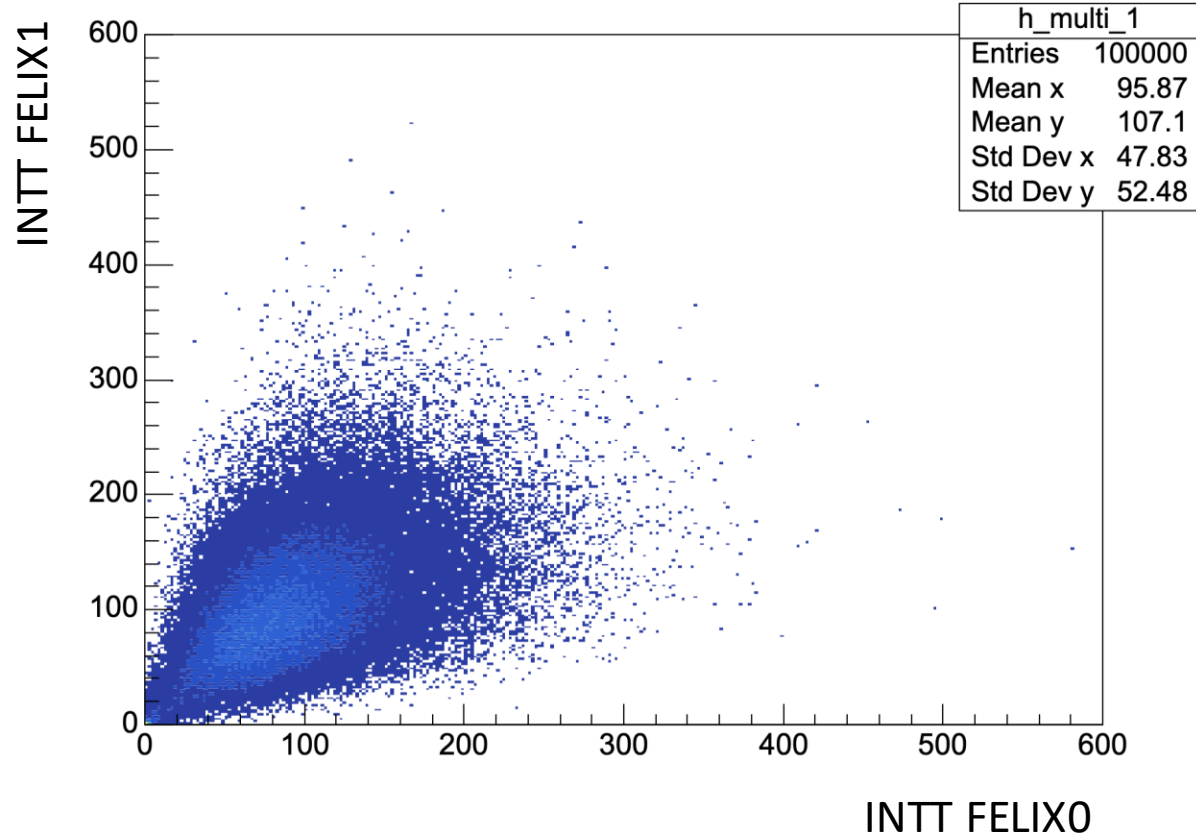


Hit-Multiplicity INTT only(3)



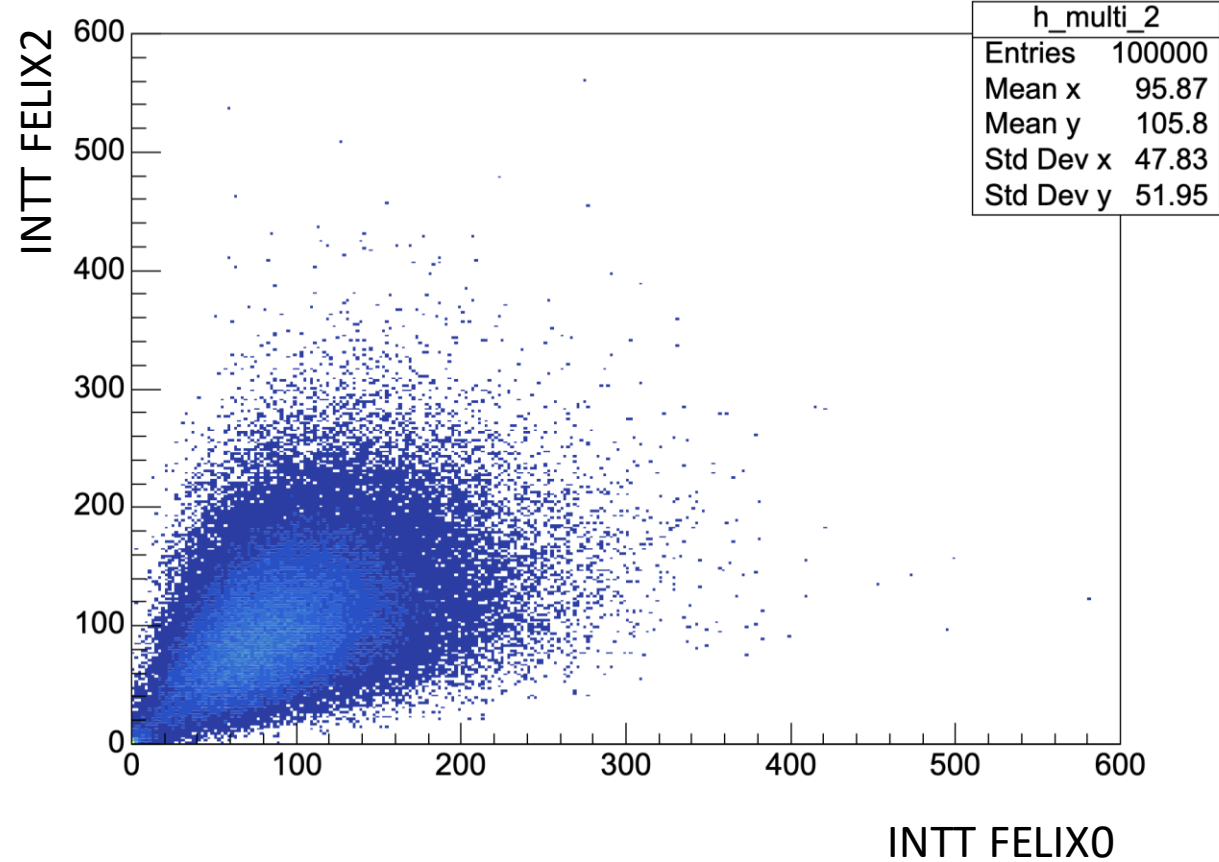
Run 50343

multi_1

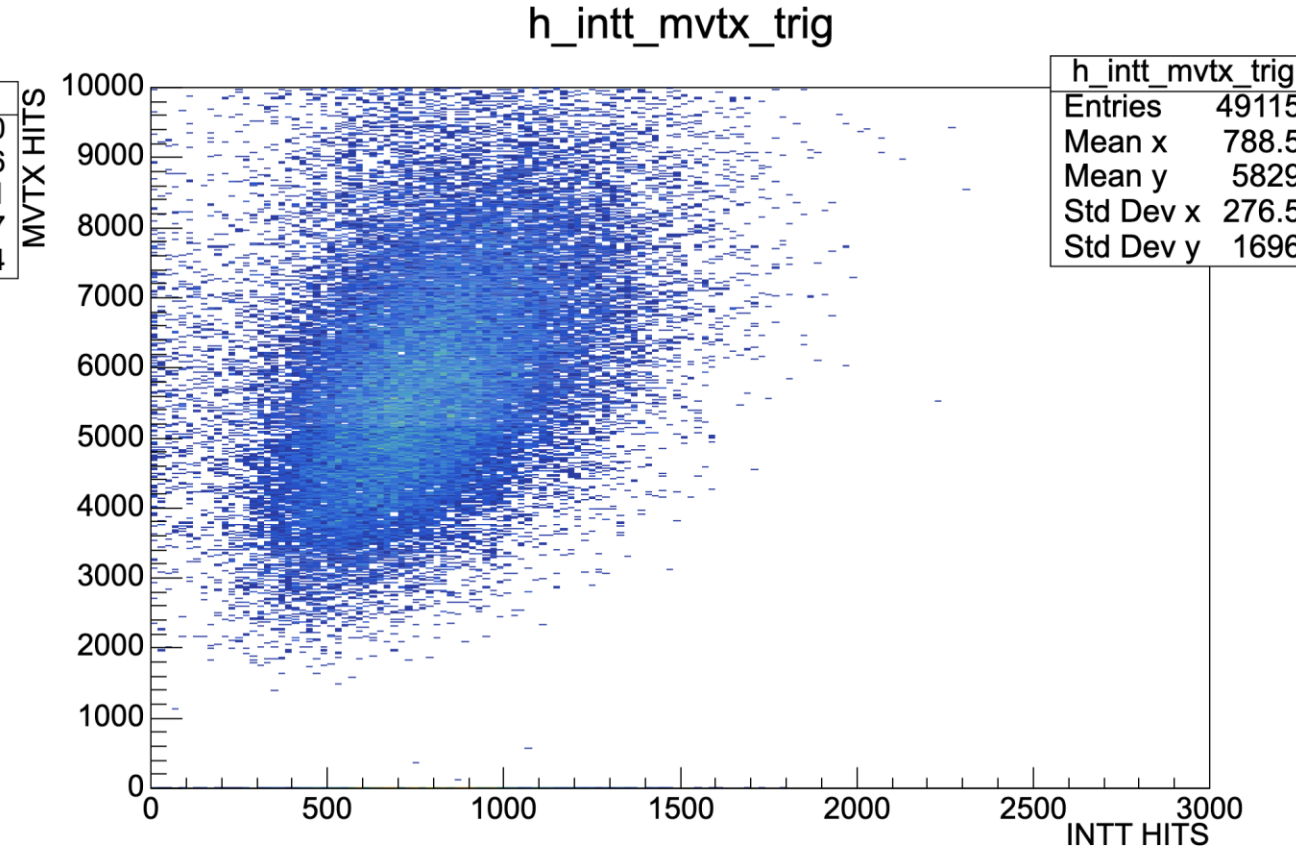
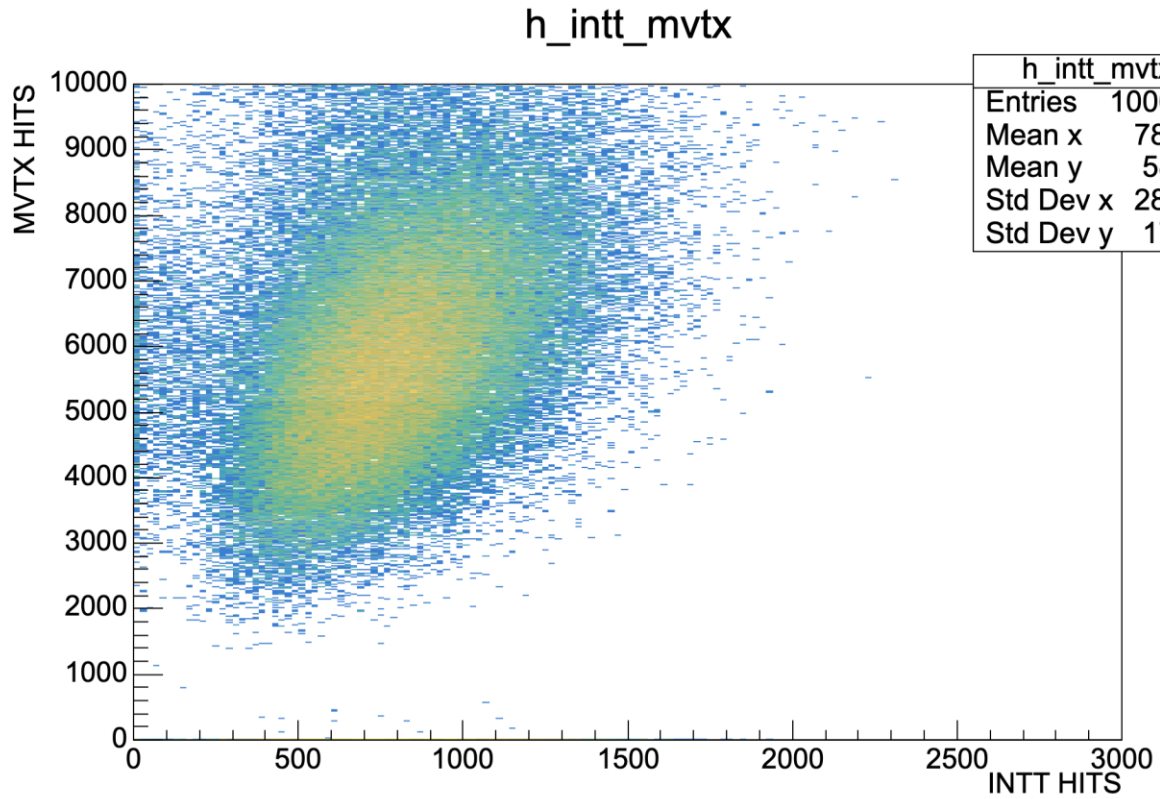


Run 50343

multi_2



Hit-Multiplicity INTT with MVTX



MBD Trigger(vtx<10) Required

InttRawHitContainer -> get_nhits() MvtxRawHitContainer -> get_nhits()
used to make the plot without any hot channel masking / detail bco matching