

Lots of inputs

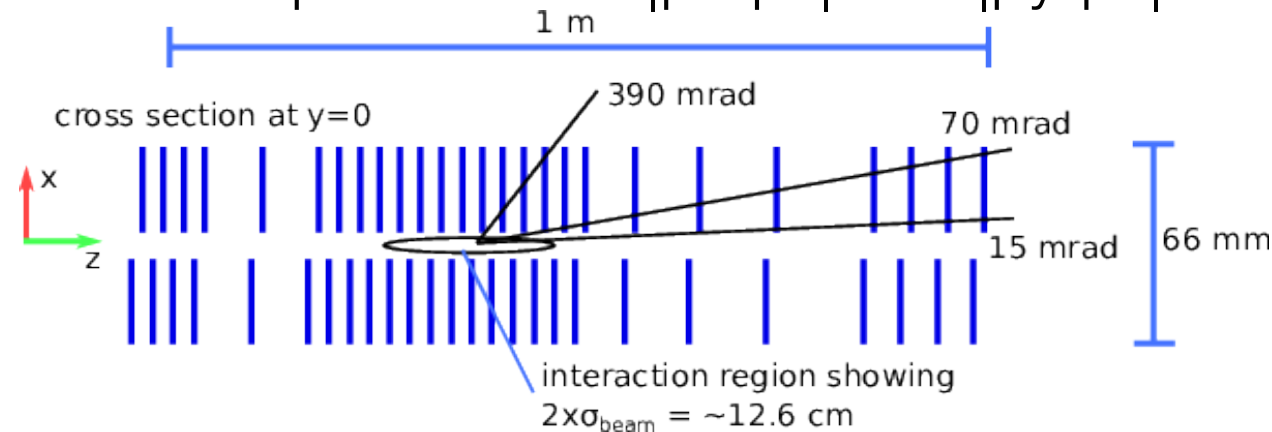
- From WP4 meeting:
 - Different % of pixels hit by 2 particles in Run3 and Run5 (from beam conditions) ✓
 - Test clustering with and without timing
 - Add info for Long tracks and tracks with $N_{hit} \geq 4$ ✓
 - Performance with no secondaries (✓)
- From VeloU2 and VeloFastSim meetings:
 - Check #PVs for Run3 (it's ok) ✓
 - Switch to BeamSpotGenerator (Stefano's code is equivalent) ✓
 - Estimate cluster time resolution
 - Check $v=c$ ansatz ✓
 - Performance with no secondaries (✓)
 - new tracking algorithm
- Others:
 - send input to Marco (still waiting for info)
 - send code to Mickail for a realistic input
 - implement clustering with rawbanks on FPGA (instruction from GBalbi)

For the next meeting

- Better understanding of Multiple Scattering effects (check on FullSim)
- Implement/check what discussed in meetings
- Moreover:
 - First document for FastSim
 - Release first version of FastSim (almost ready)

Performance FoM

- Velo particle = $2 < \eta < 5$ and is not an electron
- Long particle = Velo particle with $|p_x/p_z|$ and $|p_y/p_z| < 70$ mrad



- Efficiency = # of reconstructed particles / # of reconstructible particles
- Ghost rate = # of non-assigned tracks / # of reconstructed tracks
- Reconstructible = at least 3 or 4 hits in the geometry

Run5 performances

	3hits			4hits		
	ϵ VELO(%)	ϵ LONG(%)	PGHOST(%)	ϵ VELO(%)	ϵ LONG(%)	PGHOST(%)
$\sigma_t = 0$	88.0	95.8	0.20	89.2	96.3	0.13
$\sigma_t = 10$ ps	97.5	98.8	0.23	98.5	99.2	0.14
$\sigma_t = 20$ ps	97.9	98.8	0.32	98.9	99.3	0.17
$\sigma_t = 30$ ps	98.0	98.8	0.42	99.0	99.3	0.20
$\sigma_t = 40$ ps	98.1	98.8	0.56	99.0	99.3	0.24
$\sigma_t = 50$ ps	98.1	98.7	0.72	99.0	99.2	0.28
$\sigma_t = 60$ ps	98.0	98.7	0.90	99.0	99.2	0.33
No Timing	97.8		4.20			