Simulation TF

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Recap

- Photon+laser signal investigation done
- The g-laser signal data for both JETI40 and phaseII have been replaced, with randomised input Bremss file, each with at least 2k BXs
  - IPstrong_V1.1.00/JETI40/g_laser/16.5GeV/w0_*nm
  - IPstrong_V1.1.00/phaseII/g_laser/16.5GeV/w0_*nm
- **Sasha**: Tony is randomising the input, so that a different file is chosen each time the MC runs - can we increase the files # to >1000

- Photon+laser background-only generation:
  - see spreadsheet collecting the production progress
  - combined, we are at ~6E9 events produced for the setup where the fwd system is in air
    - Beate needs to add her chunk from DESY and everyone should keep generating as much as it is possible so we get to ~1e10 at least
  - we will start to run using the "beampipe-model" soon
  - Do we have an answer regarding the usage of ILC grid resources?

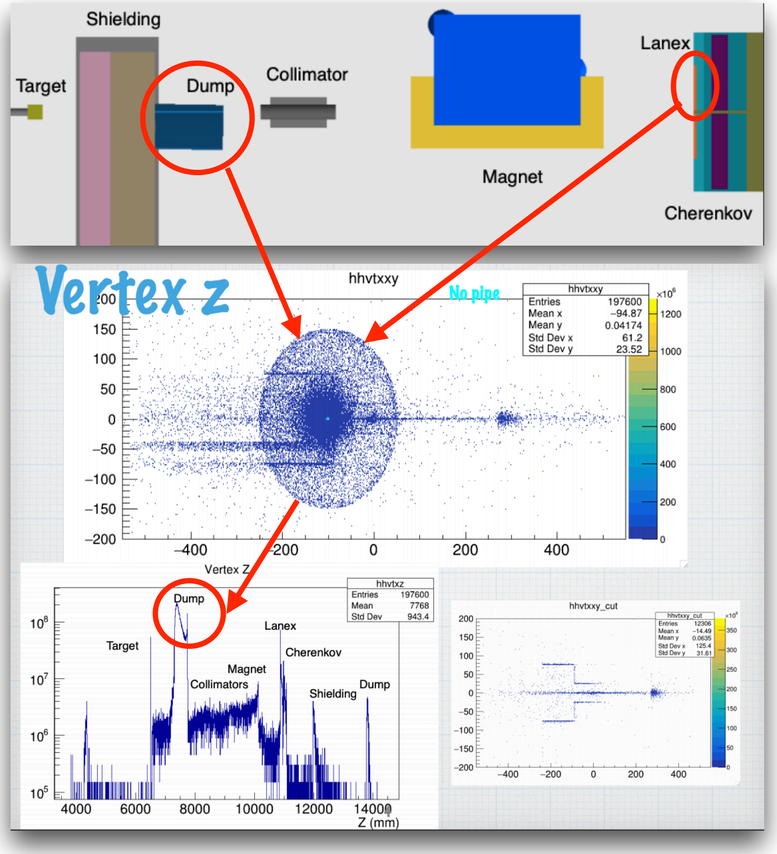
- Electron+laser background+signal generation:
  - see table from Sasha (this is with the "air-model", correct?)
  - for the IP detectors bkg study, please focus on w0_3000nm for JETI40 and w0_8000nm for phaseII
  - **Sasha**: need some guidance on how to adapt the code to read the new format (signal flags, non-sensitive volumes, BX bookkeeping, etc)

- Please start processing the bkgs and plot the multiplicities, occupancies, energy distributions, etc. at the face of the detectors **for Mon/Tue**

	A	B	C	D	E	F	G	H	I	J	K	L
1								total	5.7			
2	name	cluster	campaign	E-beam	date	Njobs	events per job	failures [%]	available [*10^9]	location(s)	Comment	
3	Louis	Grid	lxb18e	16.5	10/10/2020	12000	250000	0.4	2.988	Grid space and dust-luxe	As of 19/10 99.0% of the prod ready	
4	Arka	Grid	lxb18e	16.5	13/10/2020	6000	250000	0	1.5	Grid space	As of 19/10 99% of the grid jobs done.	
5	Arka	Weizmann cluster	lxb18e	16.5	12/10/2020	1000	100000	0.3	0.0997	Weizmann Storage		
6	Maryna	dust-ilc	lxb18e	16.5	10/10/2020	2400	100000	20	0.19	dust-ilc	cmfs problems at bird852.desy.de	
7	Rajendra	dust-ilc	lxb18e	16.5	16/10/2020	8000	100000	0	0.8	dust		
8	John	UCL	lxb18e	16.5	16/10/2020	1000	100000	0	0.1	UCL	Batch management at UCL has been slow	

Changes to the G4 model

- Electron beam dump not fully dumping
  - see talk by Maryna from Tuesday for more details
  - this doesn't affect the IP system so can still study bkgs
  - possible ways around this leakage:
    - easiest: move the shielding after the dump
    - change material to Pb (from Cu)
    - add a new magnet between the IP detectors and the target
      - bend the beam downwards (as we do in upstream area)
    - change the magnet+LANEX+Cherenkov orientation?



- Noam today: Kapton window or else?

- Louis today: beampipe between the IP system and the electrons dump?