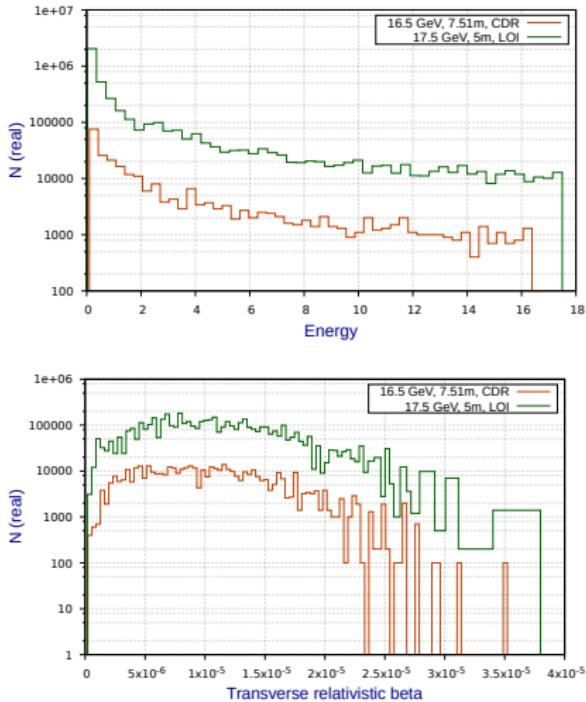


Bremsstrahlung input files



- Why so few BPPP positrons (so far) compared to last time?
- LOI: 17.5 GeV primary e-, 5m foil-IP
- CDR: 16.5 GeV primary e-, 7.5m foil-IP
- 10-20 times less bremsstrahlung photons at IP
- less energy, less e- population, further from foil to IP so brem beam divergent
- REMINDER: input files should be the state at the primary IP, not at the site of secondary production
- ICS input file from D. Seipt. Processing now

IPstrong v1.1.00 data sets, update 6/10/2020

- Changes from last time, highlighted in cyan
- New "intermediate" spot sizes (10, 13, 15 μm)
- working towards 10^4 bx for most settings

Aug 2020 Data Runs, bunch/pulse crossings completed

Experiment Config	$w_0 = 3\mu\text{m}$	$3.5\mu\text{m}$	$4.0\mu\text{m}$	$4.5\mu\text{m}$	$5.0\mu\text{m}$	$8.0\mu\text{m}$	$10.0\mu\text{m}$	$13.0\mu\text{m}$	$15.0\mu\text{m}$	$20.0\mu\text{m}$	$50.0\mu\text{m}$	$100.0\mu\text{m}$
peak SQED ξ	5.12	4.44	3.88	3.45	3.1	1.94	1.553	1.195	1.04	0.78	0.31	0.15
peak SQED χ (16.5 GeV)	0.9	0.79	0.69	0.61	0.55	0.34				0.138	0.055	0.028
JETI40 e-laser 16.5 GeV	10000	5000	5000	5000	5000	10000	370			500	5000	500
JETI40 e-laser 17.5 GeV	1000	1000	1000	1000	1000	1000						
JETI40 g-laser (coarse) 16.5 GeV	1000	1000	999	1000	1000	1000						
JETI40 g-laser 16.5 GeV	785	789	928	844	872	879						
JETI40 g-laser 17.5 GeV												
JETI40 misalignments												
JETI40 mCP production												
	$w_0 = 3.0\mu\text{m}$	$w_0 = 8.0\mu\text{m}$	$w_0 = 9.0\mu\text{m}$	$w_0 = 10.0\mu\text{m}$	$w_0 = 11.0\mu\text{m}$	$w_0 = 12.0\mu\text{m}$						
peak SQED ξ	16.7	6.27	5.57	5.01	4.56	4.18						
peak SQED χ (16.5 GeV)	2.96	1.11	0.99	0.89	0.81	0.74						
phasell e-laser 16.5 GeV		1000	1000	1000	1000	1000						
phasell e-laser 17.5 GeV		1000	1000	1000	1000	1000						
phasell g-laser 16.5 GeV		408	422	475	373	447						
phasell g-laser 17.5 GeV												
phasell misalignments												
phasell mCP production												

[/afs/desy.de/user/h/hartin/public/IPstrong_V1.1.00](https://afs/desy.de/user/h/hartin/public/IPstrong_V1.1.00)