

IPstrong v1.1.00 data sets, update 22/10/2020

- g-laser data replaced. Randomised input brem file gives better output statistics
- OPPP transition rate look-up table extended to $\xi = 20.0$
- Phase II $w_0 = 3, 4, 5, 6, 7 \mu\text{m}$ parameter points added

Aug-Oct 2020 Data Runs, bunch/pulse crossings completed

Experiment Config	$w_0 = 3 \mu\text{m}$	$3.5 \mu\text{m}$	$4.0 \mu\text{m}$	$4.5 \mu\text{m}$	$5.0 \mu\text{m}$	$6.5 \mu\text{m}$	$8.0 \mu\text{m}$	$10.0 \mu\text{m}$	$13.0 \mu\text{m}$	$15.0 \mu\text{m}$	$20.0 \mu\text{m}$	$50.0 \mu\text{m}$	$100.0 \mu\text{m}$
peak SQED ξ	5.12	4.44	3.88	3.45	3.1	2.39	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	0.42	0.34				0.138	0.055	0.028
JETI40 e-laser 16.5 GeV	10000	6000	5994	6000	6000		10000	1000	1000	1000	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	5000	2000	2000	2000	2000	2000	2000						
JETI40 g-laser 17.5 GeV													
JETI40 ics-laser 16.5 GeV													
JETI40 ics-laser 17.5 GeV													
JETI40 misalignments													
	pulse shape	$w_0 = 3.0 \mu\text{m}$	$w_0 = 4.0 \mu\text{m}$	$w_0 = 5.0 \mu\text{m}$	$w_0 = 6.0 \mu\text{m}$	$w_0 = 7.0 \mu\text{m}$	$w_0 = 8.0 \mu\text{m}$	$w_0 = 9.0 \mu\text{m}$	$w_0 = 10.0 \mu\text{m}$	$w_0 = 11.0 \mu\text{m}$	$w_0 = 12.0 \mu\text{m}$		
peak SQED ξ	gauss	16.7	12.53	10.03	8.35	7.16	6.27	5.57	5.01	4.56	4.18		
peak SQED χ (16.5 GeV)	gauss	2.96	2.22	1.78	1.48	1.27	1.11	0.99	0.89	0.81	0.74		
phasell e-laser 16.5 GeV	gauss	1000	562				1000	1000	1000	1000	1000		
phasell e-laser 17.5 GeV	gauss						1000	1000	1000	1000	1000		
phasell g-laser 16.5 GeV	gauss	2000	1000	1000	1000	1000	2000	2000	2000	2000	2000		
phasell g-laser 16.5 GeV	flatIR						2285	2000	2000	2000	2000		
phasell g-laser 17.5 GeV													
phasell ics-laser 16.5 GeV							1000						
phasell ics-laser 17.5 GeV													
phasell misalignments													

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