

Data Sample	$\mathcal{L}(\text{pb}^{-1})$	$\varepsilon(\%)^1$	$\varepsilon(\%)^2$	$\varepsilon(\%)^3$	$\varepsilon(\%)^4$	$1 + \delta^{ISR}$	$1 + \delta^{VP}$	$\sigma(\text{pb})$	σ^{UP}
3810	50.54	43.09	29.92	18.51	12.84	0.789	1.056	$1.73^{+4.81}_{-3.93} \pm 0.07$	10.7
3900	52.61	41.55	29.30	17.44	12.70	0.805	1.049	$-0.17^{+3.38}_{-2.59} \pm 0.01$	6.6
4090	52.86	36.45	25.80	15.45	10.94	0.979	1.051	$8.88^{+4.74}_{-3.97} \pm 0.35$	16.0
4310	45.08	19.64	13.67	7.50	5.43	1.926	1.052	$4.16^{+3.14}_{-2.36} \pm 0.19$	9.4
4340	505.0	21.39	15.32	8.30	5.97	1.562	1.051	$4.16^{+1.00}_{-0.92} \pm 0.17$	5.6
4390	55.57	29.45	20.76	11.36	8.28	1.123	1.051	$8.81^{+4.09}_{-3.34} \pm 0.36$	15.1
4470	111.09	16.09	11.36	5.72	4.12	2.352	1.055	$-0.48^{+1.21}_{-0.82} \pm 0.02$	2.3
4530	112.12	4.43	3.08	1.45	1.05	9.346	1.054	$0.38^{+1.13}_{-0.83} \pm 0.02$	2.5
4575	48.93	0.64	0.44	0.19	0.13	88.011	1.055	$-0.50^{+1.39}_{-0.84} \pm 0.09$	3.3
4600	586.9	0.10	0.06	0.02	0.01	16198.300	1.055	$-0.02^{+0.01}_{-0.01} \pm 0.00$	0.01
4610	103.83	0.11	0.06	0.02	0.01	734.539	1.055	$0.01^{+0.59}_{-0.39} \pm 0.00$	1.3
4630	521.52	0.26	0.18	0.08	0.06	122.587	1.054	$0.78^{+0.66}_{-0.57} \pm 0.04$	1.8
4640	552.41	0.55	0.37	0.16	0.12	59.342	1.054	$-0.36^{+0.52}_{-0.42} \pm 0.02$	0.9
4660	529.63	1.08	0.78	0.33	0.24	28.873	1.054	$0.12^{+0.55}_{-0.46} \pm 0.00$	1.1
4680	1669.31	1.82	1.27	0.54	0.39	17.760	1.054	$0.34^{+0.33}_{-0.30} \pm 0.01$	0.9
4700	536.45	2.46	1.70	0.71	0.53	13.285	1.055	$-0.01^{+0.55}_{-0.45} \pm 0.00$	1.1
4740	164.27	4.05	2.84	1.17	0.83	8.152	1.055	$0.21^{+0.88}_{-0.63} \pm 0.01$	2.0
4750	367.21	4.49	3.15	1.26	0.92	7.402	1.055	$0.62^{+0.76}_{-0.63} \pm 0.02$	1.8
4780	512.78	5.60	3.97	1.54	1.12	5.953	1.055	$-0.85^{+0.43}_{-0.31} \pm 0.03$	0.6
4840	527.29	7.70	5.51	1.98	1.44	4.370	1.056	$0.31^{+0.51}_{-0.43} \pm 0.01$	1.2
4914	208.11	9.56	6.76	2.21	1.65	3.546	1.056	$2.17^{+1.09}_{-0.88} \pm 0.08$	3.9
4946	160.37	10.01	7.14	2.26	1.63	3.346	1.056	$1.08^{+1.20}_{-0.91} \pm 0.04$	3.1

¹ $J/\psi \rightarrow \mu^+\mu^-, \eta \rightarrow \gamma\gamma$

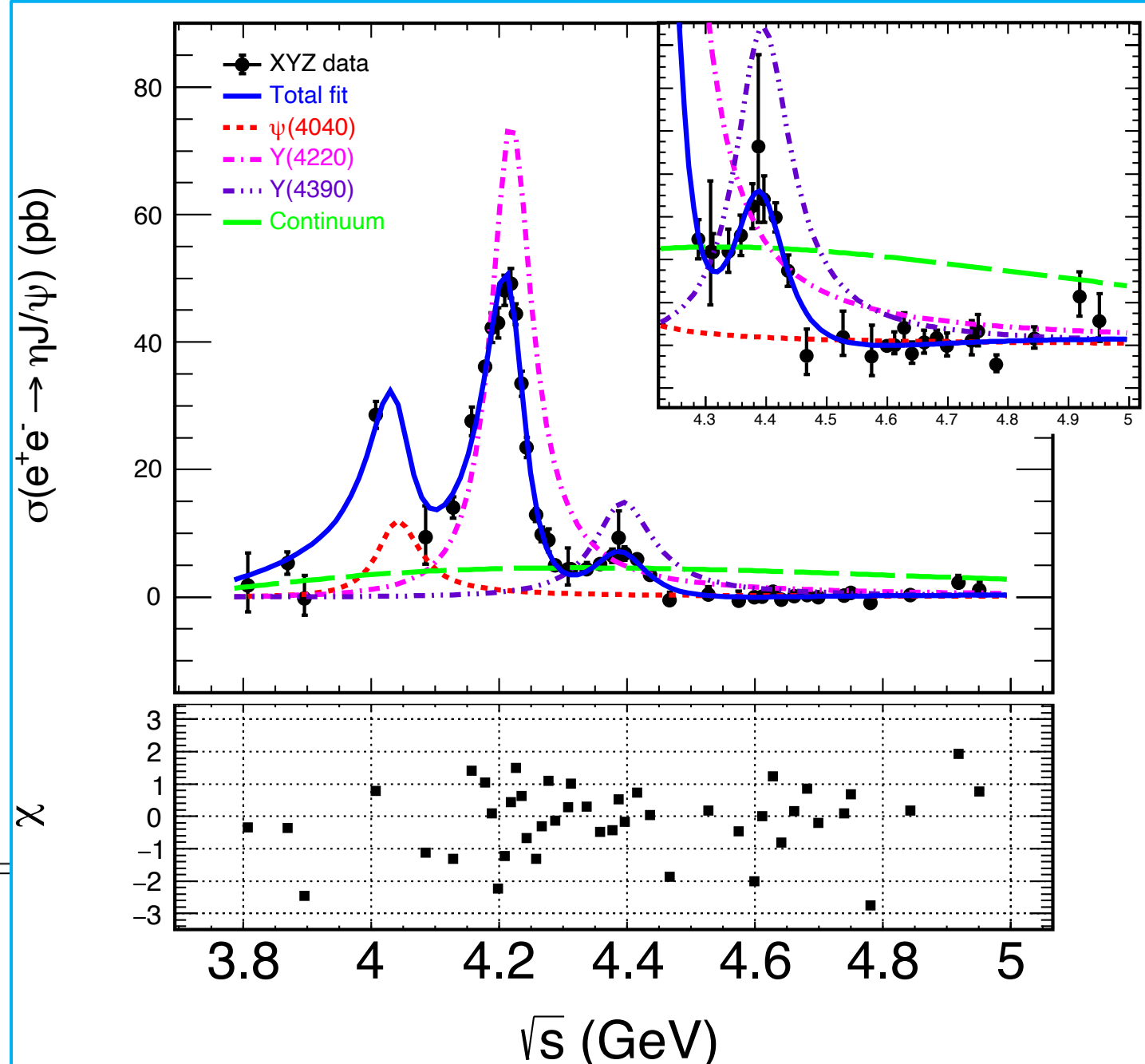
² $J/\psi \rightarrow e^+e^-, \eta \rightarrow \gamma\gamma$

³ $J/\psi \rightarrow \mu^+\mu^-, \eta \rightarrow \pi^+\pi^-\pi^0$

⁴ $J/\psi \rightarrow e^+e^-, \eta \rightarrow \pi^+\pi^-\pi^0$

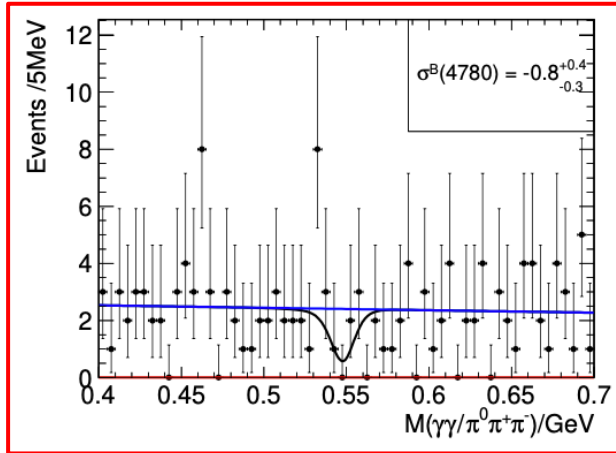
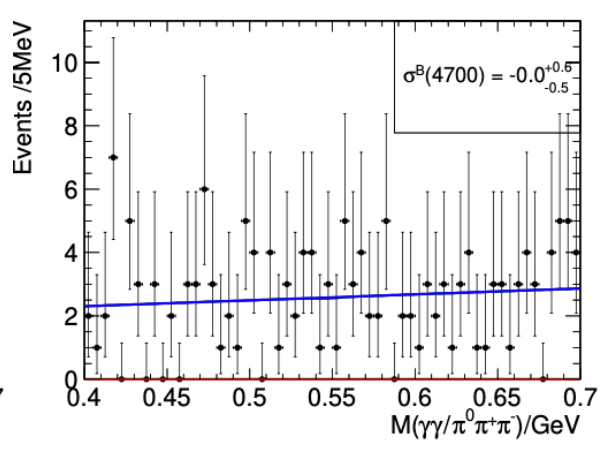
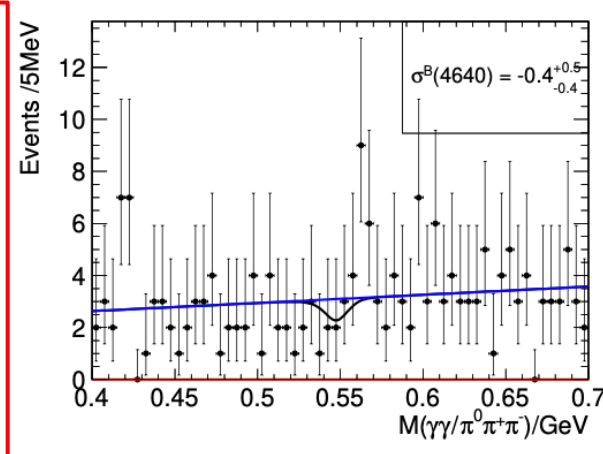
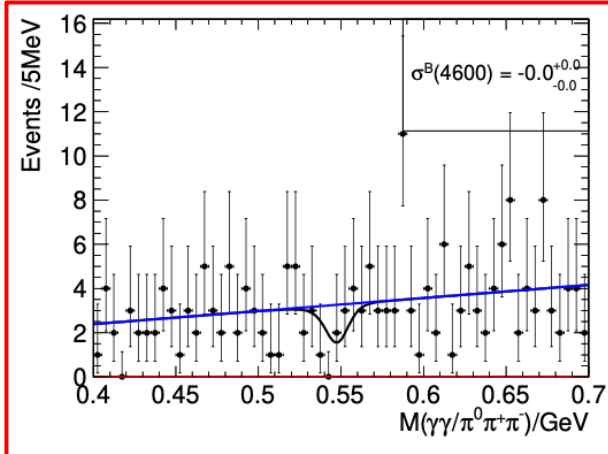
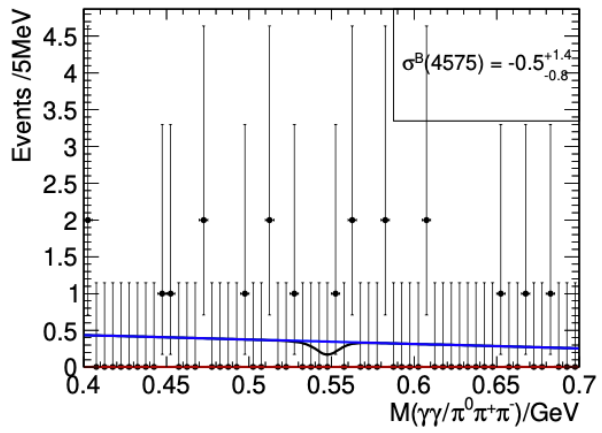
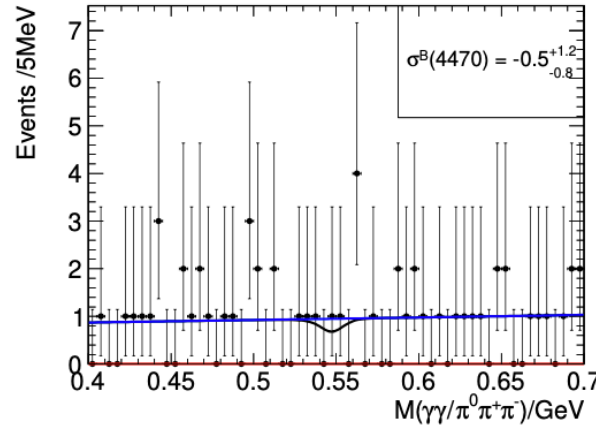
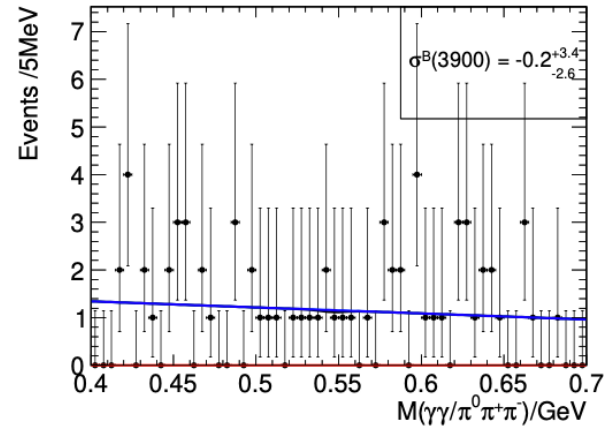
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4914	$2.17^{+1.09}_{-0.88} \pm 0.08$	3.9
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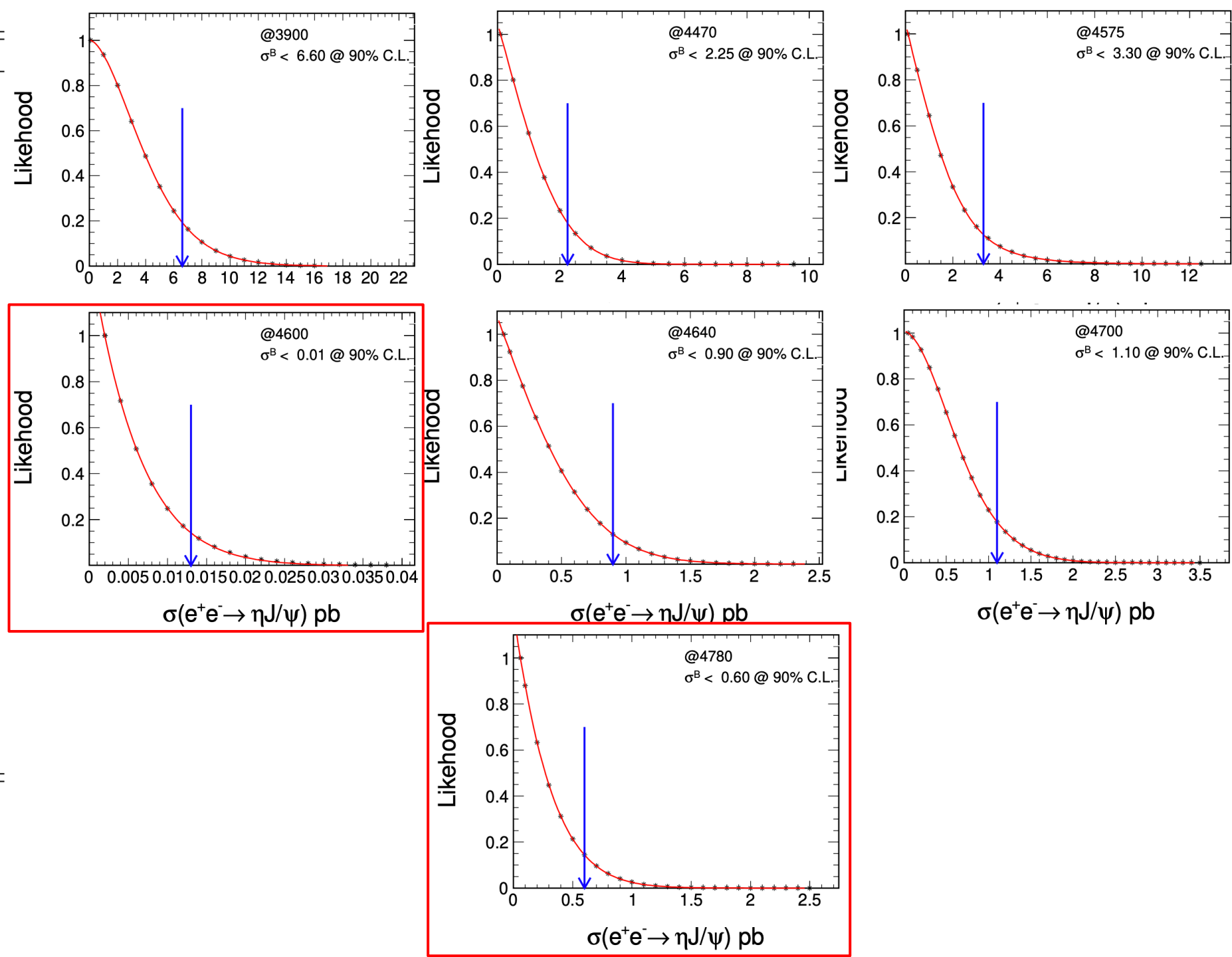
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					0.789	1.056
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					0.979	1.051
					1.926	1.052
					1.562	1.051
					1.123	1.051
					2.352	1.055
					9.346	1.054
					88.011	1.055
					16198.300	1.055
					734.539	1.055
					122.587	1.054
					59.342	1.054
					28.873	1.054
					17.760	1.054
					13.285	1.055
					8.152	1.055
					7.402	1.055
					5.953	1.055
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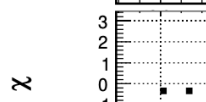
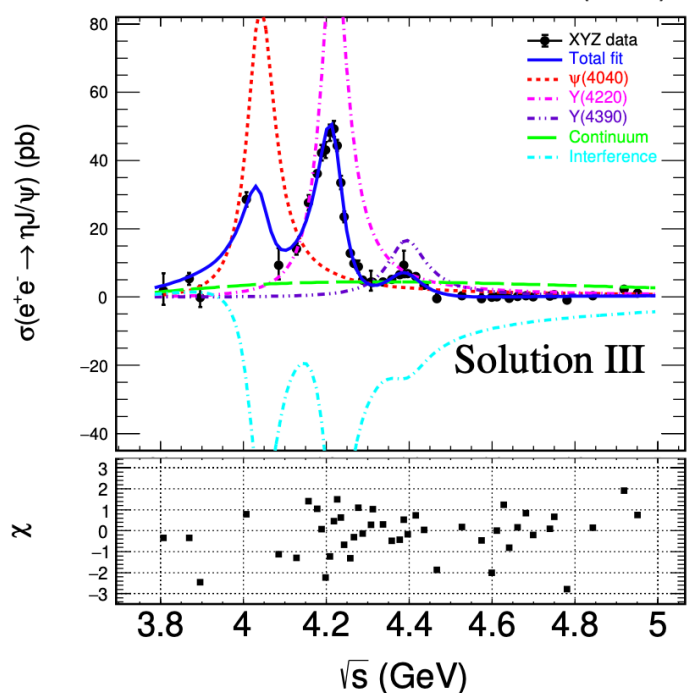
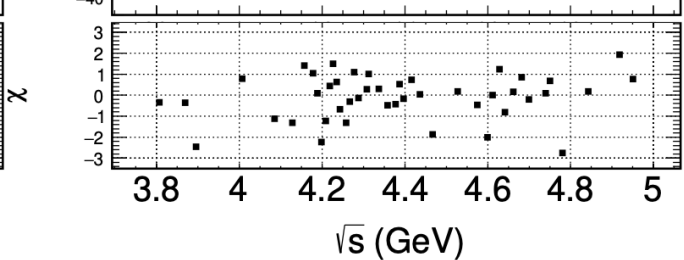
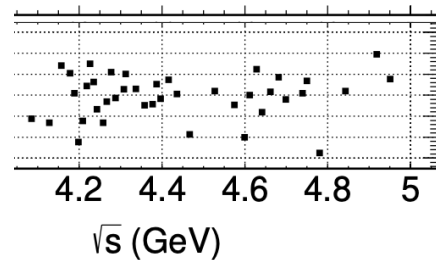
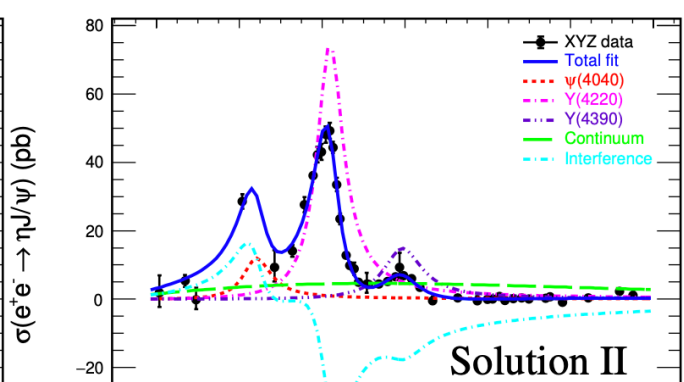
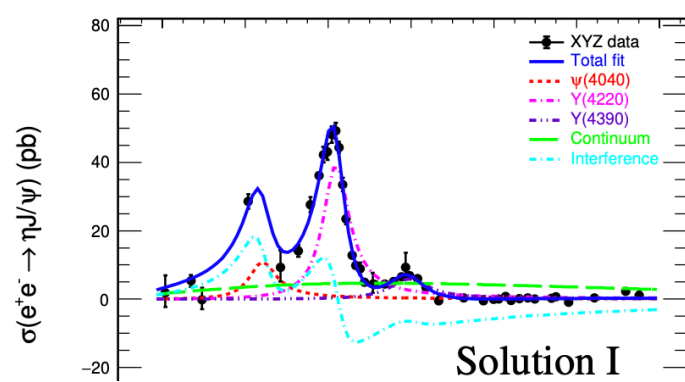
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$\Gamma/\psi \rightarrow \mu^-$
 $\Gamma/\psi \rightarrow e^+$
 $\Gamma/\psi \rightarrow \mu^-$
 $\Gamma/\psi \rightarrow e^+$





Parameter	Solution I	Solution II	Solution III
M_1 (MeV/ c^2)		4039 (fixed)	
Γ_1 (MeV)		80 (fixed)	
$\Gamma_1^{e^+e^-} \mathcal{B}r_1$ (eV)	1.0 ± 0.2	1.1 ± 0.2	7.6 ± 0.5
ϕ_1 (rad)	2.8 ± 0.2	3.0 ± 0.2	4.6 ± 0.1
M_2 (MeV/ c^2)		4216.9 ± 2.1	
Γ_2 (MeV)		78.0 ± 4.0	
$\Gamma_2^{e^+e^-} \mathcal{B}r_2$ (eV)	3.7 ± 0.4	7.0 ± 0.7	10.0 ± 0.8
ϕ_2 (rad)	3.4 ± 0.1	4.1 ± 0.1	3.3 ± 0.1
M_3 (MeV/ c^2)		4391.1 ± 8.4	
Γ_3 (MeV)		112.6 ± 23.7	
$\Gamma_3^{e^+e^-} \mathcal{B}r_3$ (eV)	0.9 ± 0.2	2.2 ± 0.7	2.5 ± 0.6
ϕ_3 (rad)	3.5 ± 0.2	2.6 ± 0.1	2.0 ± 0.2
p_1	499.7 ± 188.8	496.7 ± 191.9	486.5 ± 184.8
p_0	2.3 ± 0.5	2.3 ± 0.6	2.3 ± 0.5

