

$$A = (aS_1 + bD_1)(cS_2 + dD_2)$$

$$= acS_1S_2 + adS_1D_2 + \boxed{bcD_1S_2 + bdD_1D_2}$$

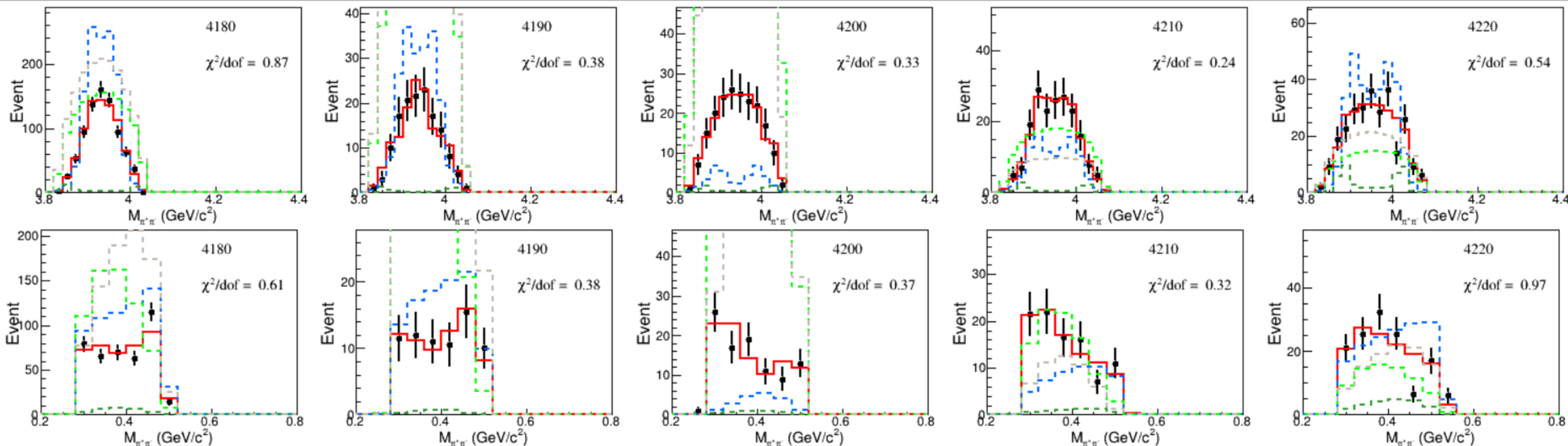
- Let $c = 1$, then d is shared by all energy points
- Three free parameters

	PHSP			TOYMC		
	DS+DD Significance	Zc4020 Fraction	Zc3900 Fraction	DS+DD Significance	Zc4020 Fraction	Zc3900 Fraction
4180	2.27	0.02	0.18	2.76	0.029	1.63
4190	0.05	0.04	1.49	0.05	0.028	1.34
4200	1.55	0.17	0.24	1.26	0.133	0.30
4210	0.23	0.08	0.79	0.41	0.061	0.68
4220	0.81	0.03	0.54	0.87	0.017	0.52
4230	2.21	0.05	0.50	2.36	0.045	0.48
4237	1.28	0.21	1.06	0.90	0.306	0.88
4246	1.63	0.05	0.27	1.68	0.069	0.30
4260	3.69	0.01	0.23	3.44	0.007	0.26

Except 4180, the significance of Zc4020 is very low for low energy points

- 4180 and 4190, Zc3900 has great interference with F0
- Other energy points, F0500 has great interference with F0980

	PHSP	TOYMC
	Zc4020 Significance	Zc4020 Significance
4180	3.59	3.42
4190	0.33	0.23
4200	0.62	0.85
4210	0.56	0.64
4220	0.89	0.89
4230	2.44	2.88
4237	1.91	2.93
4246	1.30	1.57
4260	0.19	0.32

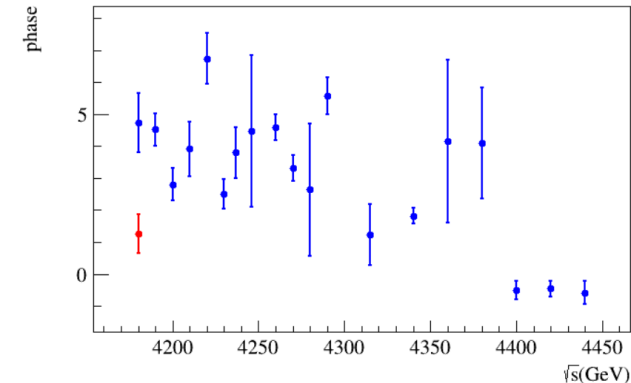
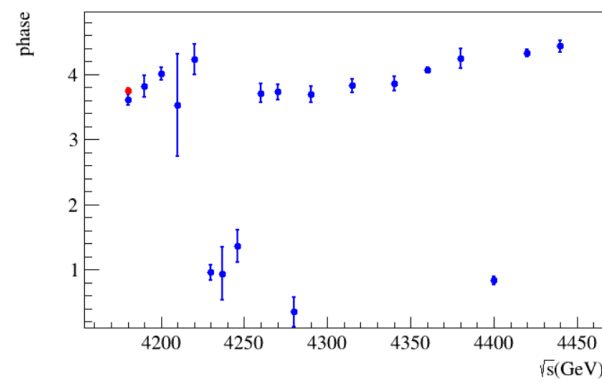
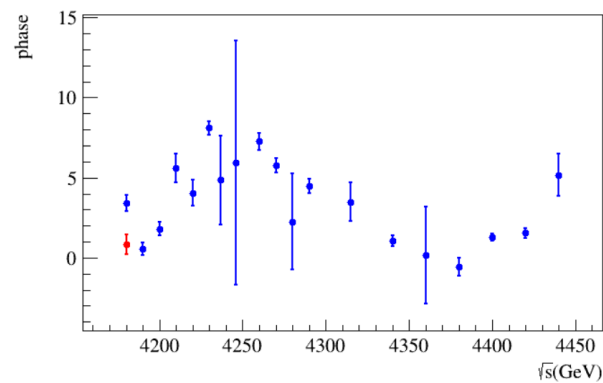
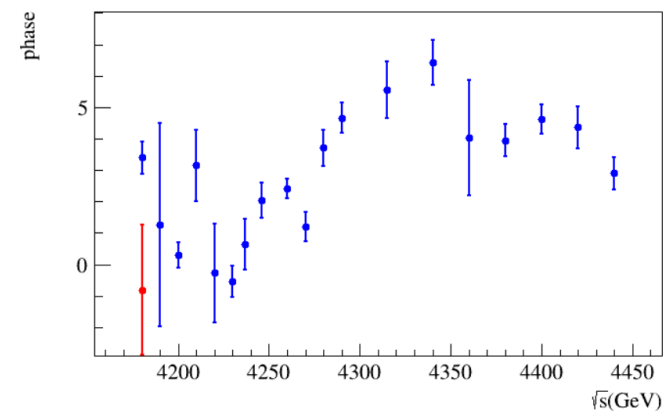
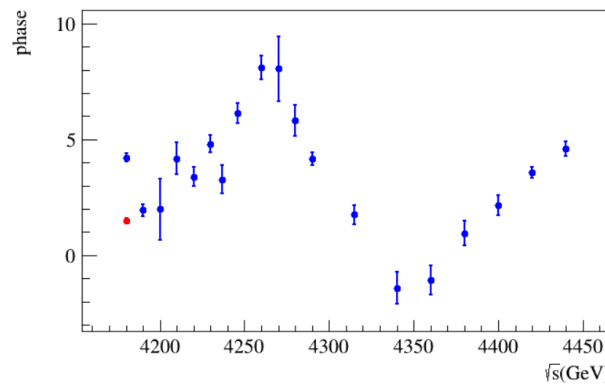
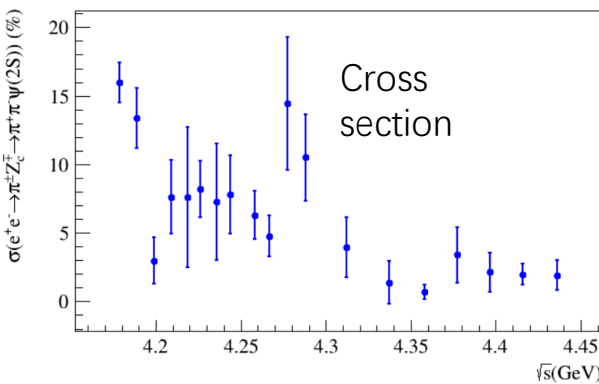
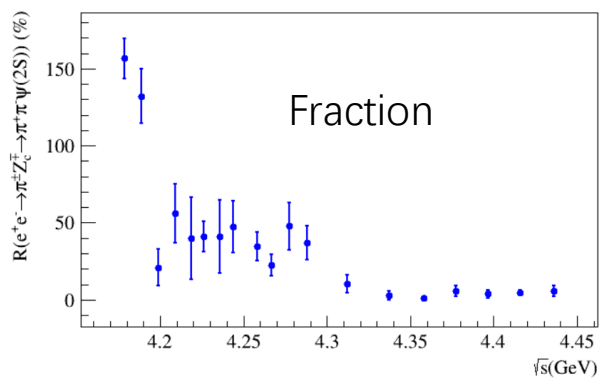


Zc3900+F0500F0980

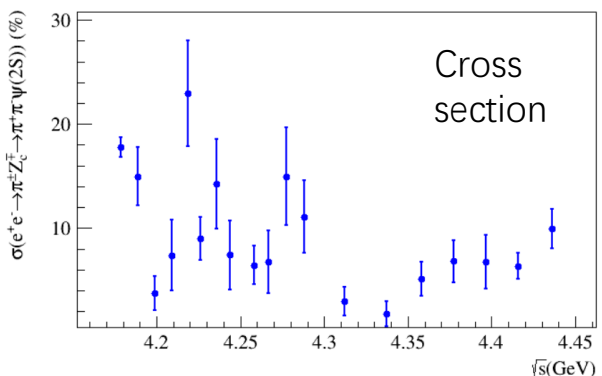
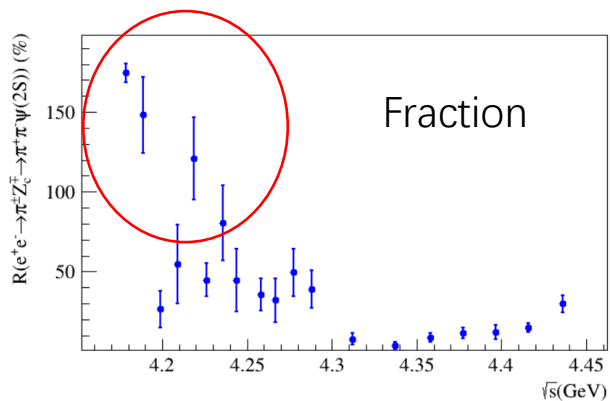
TOYMC

4180

Minimum Likelihood: -1334.14 Fraction of #pi Zc(3900) = 0.28594
Minimum Likelihood: -1334.1775227642 Fraction of #pi Zc(3900) = 1.61423



Zc3900+Zc4020+F0500F0980



4180

Minimum Likelihood:	-1337.74541	Fraction of #pi	Zc(3900)	=	0.18928
Minimum Likelihood:	-1340.59096	Fraction of #pi	Zc(3900)	=	1.52603
Minimum Likelihood:	-1341.6473544964	Fraction of #pi	Zc(3900)	=	1.55615

4220

Minimum Likelihood:	-486.354	Fraction of #pi	Zc(3900)	=	0.45279
Minimum Likelihood:	-486.36691	Fraction of #pi	Zc(3900)	=	0.32576
Minimum Likelihood:	-486.42855	Fraction of #pi	Zc(3900)	=	0.63033
Minimum Likelihood:	-486.82650	Fraction of #pi	Zc(3900)	=	1.13805

4237

Minimum Likelihood:	-525.42508	Fraction of #pi	Zc(3900)	=	0.36837
Minimum Likelihood:	-525.84043	Fraction of #pi	Zc(3900)	=	0.25583
Minimum Likelihood:	-528.89414	Fraction of #pi	Zc(3900)	=	0.60801
Minimum Likelihood:	-529.37319	Fraction of #pi	Zc(3900)	=	0.86243
Minimum Likelihood:	-529.87263	Fraction of #pi	Zc(3900)	=	0.72136
Minimum Likelihood:	-530.883	Fraction of #pi	Zc(3900)	=	0.67578

Zc3900+Zc4020+F0500F0980

