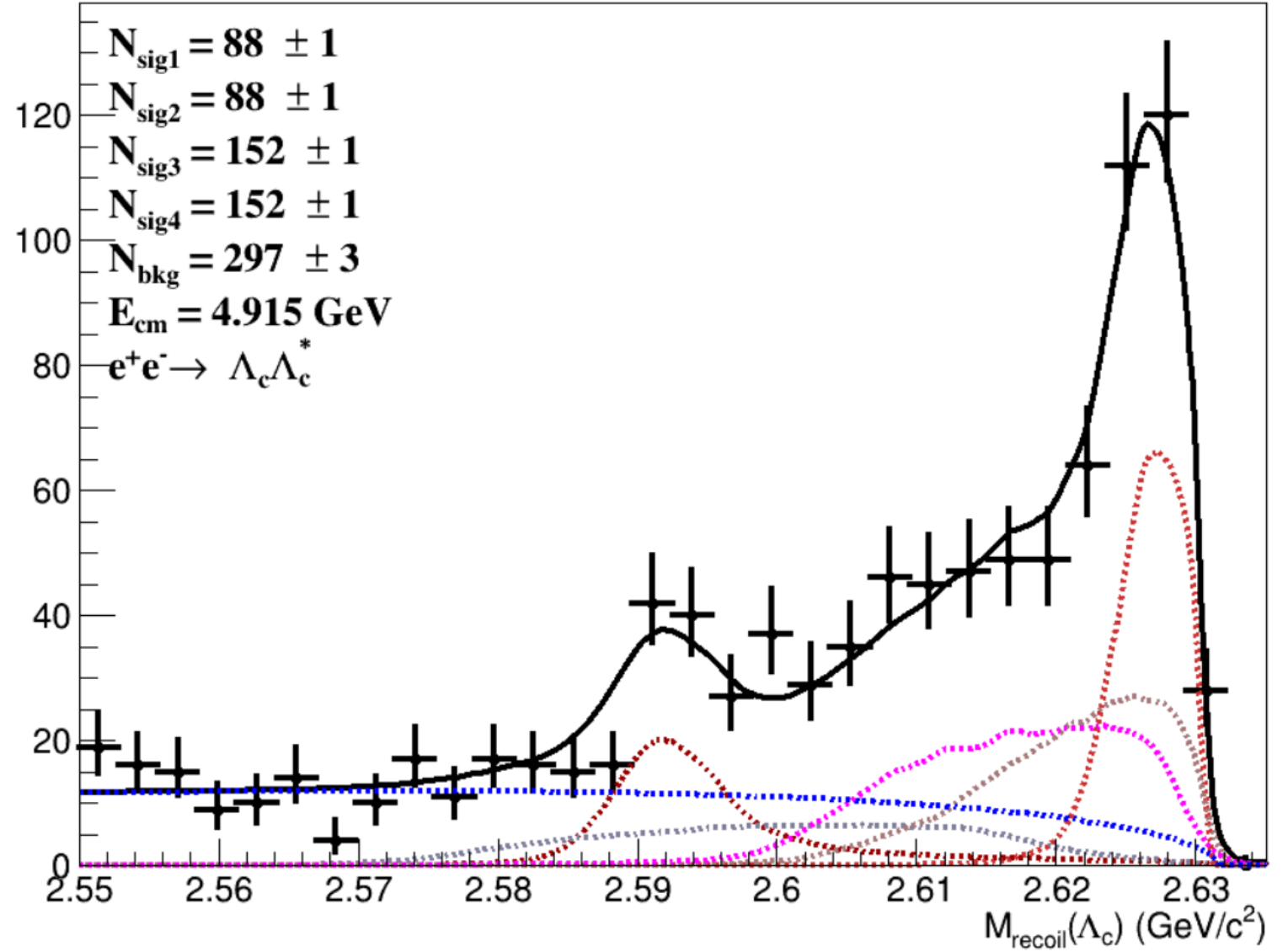


Yield of $\Sigma_c \bar{\Sigma}_c$: 181.7



Formula:

$$N_{\Sigma_c \bar{\Sigma}_c}^{ST,i} = N_{\Sigma_c \bar{\Sigma}_c}^{ST} \cdot Br_i \cdot \varepsilon_i^{ST}$$

$$\sum N_{\Sigma_c \bar{\Sigma}_c}^{ST,i} = N_{\Sigma_c \bar{\Sigma}_c}^{ST} \cdot \sum Br_i \varepsilon_i^{ST}$$

$$N_{\Sigma_c \bar{\Sigma}_c}^{ST,1} / \sum N_{\Sigma_c \bar{\Sigma}_c}^{ST,i} = Br_1 \varepsilon_1^{ST} / \sum Br_i \varepsilon_i^{ST}$$

$$\sum N_{\Sigma_c \bar{\Sigma}_c}^{ST,i} = N_{\Sigma_c \bar{\Sigma}_c}^{ST,1} \cdot \sum Br_i \varepsilon_i^{ST} / Br_1 \varepsilon_1^{ST}$$

$$N_{\Sigma_c \bar{\Sigma}_c}^{ST,i} = Br_i \varepsilon_i^{ST} \cdot \sum N_{\Sigma_c \bar{\Sigma}_c}^{ST,i} / \sum Br_i \varepsilon_i^{ST}$$

Efficiency:

Modes	$e^+e^- \rightarrow \Sigma_c^0 \bar{\Sigma}_c^0$		$e^+e^- \rightarrow \Sigma_c^{++} \bar{\Sigma}_c^{--}$	
	ST	DT	ST	DT
$\Lambda_c^+ \rightarrow p K^- \pi^+$	51.12%	44.52%	50.99%	42.64%
$\Lambda_c^+ \rightarrow p K_S$	51.48%	30.48%	51.16%	31.77%
$\Lambda_c^+ \rightarrow \Lambda \pi^+$	36.38%	42.73%	37.50%	44.44%
$\Lambda_c^+ \rightarrow p K^- \pi^+ \pi^0$	39.80%	24.27%	38.02%	25.99%
$\Lambda_c^+ \rightarrow p K_S \pi^0$	23.66%	27.27%	23.09%	31.66%
$\Lambda_c^+ \rightarrow \Lambda \pi^+ \pi^0$	16.68%	37.06%	18.06%	39.41%
$\Lambda_c^+ \rightarrow p K_S \pi^+ \pi^-$	31.12%	32.05%	29.53%	26.61%
$\Lambda_c^+ \rightarrow \Lambda \pi^+ \pi^+ \pi^-$	23.23%	26.30%	22.56%	31.45%
$\Lambda_c^+ \rightarrow \Sigma^0 \pi^+$	31.32%	40.73%	32.15%	41.64%
$\Lambda_c^+ \rightarrow \Sigma^+ \pi^+ \pi^-$	31.05%	36.96%	33.05%	33.63%

$$e^+e^- \rightarrow \Sigma_c^0 \bar{\Sigma}_c^0$$

Mode	Br_i	ε_i^{ST}	$Br_i^* \varepsilon_i^{ST}$
$\Lambda_c^+ \rightarrow p K^- \pi^+$	0.0628	51.12%	0.032106
$\Lambda_c^+ \rightarrow p K_S$	0.011003	51.48%	0.005664
$\Lambda_c^+ \rightarrow \Lambda \pi^+$	0.008307	36.38%	0.003022
$\Lambda_c^+ \rightarrow p K^- \pi^+ \pi^0$	0.044075	39.80%	0.017542
$\Lambda_c^+ \rightarrow p K_S \pi^0$	0.013472	23.66%	0.003188
$\Lambda_c^+ \rightarrow \Lambda \pi^+ \pi^0$	0.044835	16.68%	0.007477
$\Lambda_c^+ \rightarrow p K_S \pi^+ \pi^-$	0.011072	31.12%	0.003445
$\Lambda_c^+ \rightarrow \Lambda \pi^+ \pi^+ \pi^-$	0.02326	23.23%	0.005404
$\Lambda_c^+ \rightarrow \Sigma^0 \pi^+$	0.008243	31.32%	0.002582
$\Lambda_c^+ \rightarrow \Sigma^+ \pi^+ \pi^-$	0.022933	31.05%	0.007121
		$\sum Br_i \varepsilon_i^{ST} =$	0.087553

$$\sum N_{\Sigma_c \bar{\Sigma}_c}^{ST,i} = N_{\Sigma_c \bar{\Sigma}_c}^{ST,1} \cdot \sum Br_i \varepsilon_i^{ST} / Br_1 \varepsilon_1^{ST} = 166.345$$

$$e^+e^- \rightarrow \Sigma_c^0 \bar{\Sigma}_c^0$$

$$N_{\Sigma_c \bar{\Sigma}_c}^{ST,i} = Br_i \varepsilon_i^{ST} \cdot \sum N_{\Sigma_c \bar{\Sigma}_c}^{ST,i} / \sum Br_i \varepsilon_i^{ST}, N_{\Sigma_c \bar{\Sigma}_c}^{DT,i} = N_{\Sigma_c \bar{\Sigma}_c}^{ST,i} \cdot \varepsilon_i^{DT} / 2$$

Mode	$\sum Br_i \varepsilon_i^{ST}$	$\sum N_{\Sigma_c \bar{\Sigma}_c}^{ST,i}$	$N_{\Sigma_c \bar{\Sigma}_c}^{ST,i}$	ε_i^{DT}	DT Yield
$\Lambda_c^+ \rightarrow p K^- \pi^+$	0.087553	166.3454	61	0.445221	13.57925
$\Lambda_c^+ \rightarrow p K_S$	0.087553	166.3454	10.76196	0.304821	1.640236
$\Lambda_c^+ \rightarrow \Lambda \pi^+$	0.087553	166.3454	5.74236	0.427273	1.226777
$\Lambda_c^+ \rightarrow p K^- \pi^+ \pi^0$	0.087553	166.3454	33.32958	0.242698	4.044508
$\Lambda_c^+ \rightarrow p K_S \pi^0$	0.087553	166.3454	6.057038	0.272727	0.82596
$\Lambda_c^+ \rightarrow \Lambda \pi^+ \pi^0$	0.087553	166.3454	14.20613	0.370647	2.632728
$\Lambda_c^+ \rightarrow p K_S \pi^+ \pi^-$	0.087553	166.3454	6.545766	0.320548	1.049116
$\Lambda_c^+ \rightarrow \Lambda \pi^+ \pi^+ \pi^-$	0.087553	166.3454	10.26734	0.26297	1.349999
$\Lambda_c^+ \rightarrow \Sigma^0 \pi^+$	0.087553	166.3454	4.905331	0.407273	0.998904
$\Lambda_c^+ \rightarrow \Sigma^+ \pi^+ \pi^-$	0.087553	166.3454	13.52986	0.369624	2.500478
				$\sum N_{\Sigma_c \bar{\Sigma}_c}^{DT,i}$	29.84796

$$e^+e^- \rightarrow \Sigma_c^{++}\bar{\Sigma}_c^{--}$$

Mode	Br_i	ε_i^{ST}	$Br_i^*\varepsilon_i^{ST}$
$\Lambda_c^+ \rightarrow pK^-\pi^+$	0.0628	50.99%	0.032021
$\Lambda_c^+ \rightarrow pK_S$	0.011003	51.16%	0.005629
$\Lambda_c^+ \rightarrow \Lambda\pi^+$	0.008307	37.50%	0.003115
$\Lambda_c^+ \rightarrow pK^-\pi^+\pi^0$	0.044075	38.02%	0.016755
$\Lambda_c^+ \rightarrow pK_S\pi^0$	0.013472	23.09%	0.00311
$\Lambda_c^+ \rightarrow \Lambda\pi^+\pi^0$	0.044835	18.06%	0.008096
$\Lambda_c^+ \rightarrow pK_S\pi^+\pi^-$	0.011072	29.53%	0.00327
$\Lambda_c^+ \rightarrow \Lambda\pi^+\pi^+\pi^-$	0.02326	22.56%	0.005247
$\Lambda_c^+ \rightarrow \Sigma^0\pi^+$	0.008243	32.15%	0.00265
$\Lambda_c^+ \rightarrow \Sigma^+\pi^+\pi^-$	0.022933	33.05%	0.00758
		$\sum Br_i\varepsilon_i^{ST}=$	0.08747

$$\sum N_{\Sigma_c\bar{\Sigma}_c}^{ST,i} = N_{\Sigma_c\bar{\Sigma}_c}^{ST,1} \cdot \sum Br_i\varepsilon_i^{ST} / Br_1\varepsilon_1^{ST} = 166.639$$

$$e^+e^- \rightarrow \Sigma_c^{++}\bar{\Sigma}_c^{--}$$

$$N_{\Sigma_c\bar{\Sigma}_c}^{ST,i} = Br_i \varepsilon_i^{ST} \cdot \sum N_{\Sigma_c\bar{\Sigma}_c}^{ST,i} / \sum Br_i \varepsilon_i^{ST}, N_{\Sigma_c\bar{\Sigma}_c}^{DT,i} = N_{\Sigma_c\bar{\Sigma}_c}^{ST,i} \cdot \varepsilon_i^{DT} / 2$$

Mode	$\sum Br_i \varepsilon_i^{ST}$	$\sum N_{\Sigma_c\bar{\Sigma}_c}^{ST,i}$	$N_{\Sigma_c\bar{\Sigma}_c}^{ST,i}$	ε_i^{DT}	DT Yield
$\Lambda_c^+ \rightarrow pK^-\pi^+$	0.087475	166.6395	61	0.426388	13.00485
$\Lambda_c^+ \rightarrow pK_S$	0.087475	166.6395	10.72349	0.317684	1.70334
$\Lambda_c^+ \rightarrow \Lambda\pi^+$	0.087475	166.6395	5.934306	0.444444	1.318735
$\Lambda_c^+ \rightarrow pK^-\pi^+\pi^0$	0.087475	166.6395	31.9189	0.259912	4.148051
$\Lambda_c^+ \rightarrow pK_S\pi^0$	0.087475	166.6395	5.925165	0.316568	0.937859
$\Lambda_c^+ \rightarrow \Lambda\pi^+\pi^0$	0.087475	166.6395	15.42362	0.394118	3.039361
$\Lambda_c^+ \rightarrow pK_S\pi^+\pi^-$	0.087475	166.6395	6.229283	0.266082	0.82875
$\Lambda_c^+ \rightarrow \Lambda\pi^+\pi^+\pi^-$	0.087475	166.6395	9.995987	0.314545	1.572096
$\Lambda_c^+ \rightarrow \Sigma^0\pi^+$	0.087475	166.6395	5.048704	0.41637	1.051065
$\Lambda_c^+ \rightarrow \Sigma^+\pi^+\pi^-$	0.087475	166.6395	14.44003	0.336306	2.428133
				$\sum N_{\Sigma_c\bar{\Sigma}_c}^{DT,i}$	30.03224

