

PWA of $\Lambda_c^+ \rightarrow \Lambda \pi^+ \pi^0$ decays status report

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Weekly group meeting & note

PWA test with different components

fit fractions

NR(0+) 0.039 +/- 0.035

NR(1-) 0.40 +/- 0.04

NR(1-)xNR(0+) 0.000040 +/- 0.000011

Sigma(1385)0 0.059 +/- 0.006

Sigma(1385)0xNR(1-) -0.021 +/- 0.008

Sigma(1385)0xNR(0+) -0.0001 +/- 0.0009

Sigma(1385)p 0.091 +/- 0.009

Sigma(1385)pxSigma(1385)0 -0.00282 +/- 0.00030

Sigma(1385)pxNR(1-) -0.004 +/- 0.012

Sigma(1385)pxNR(0+) -0.0004 +/- 0.0014

rho(770) 0.74 +/- 0.12

rho(770)xSigma(1385)p -0.054 +/- 0.011

rho(770)xSigma(1385)0 -0.032 +/- 0.008

rho(770)xNR(1-) -0.21 +/- 0.13

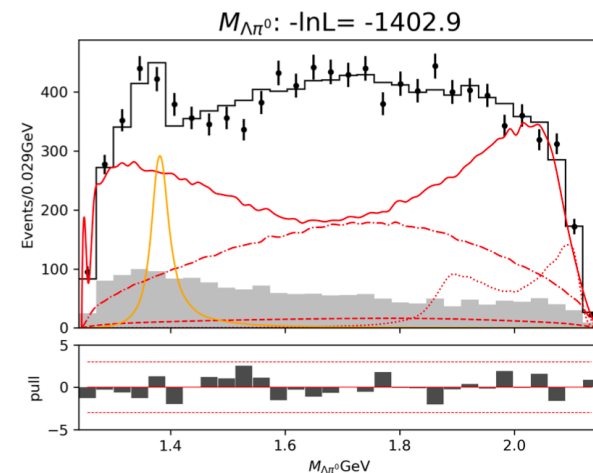
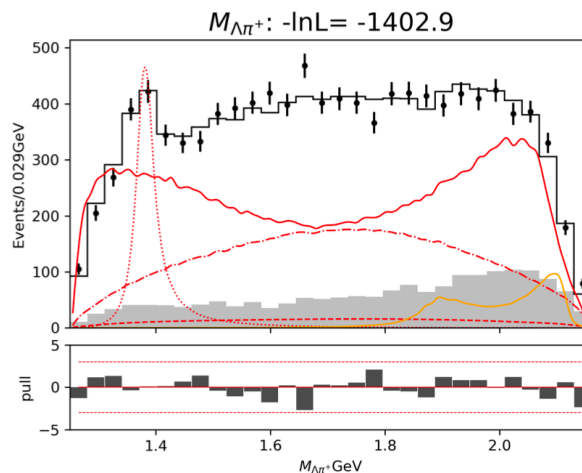
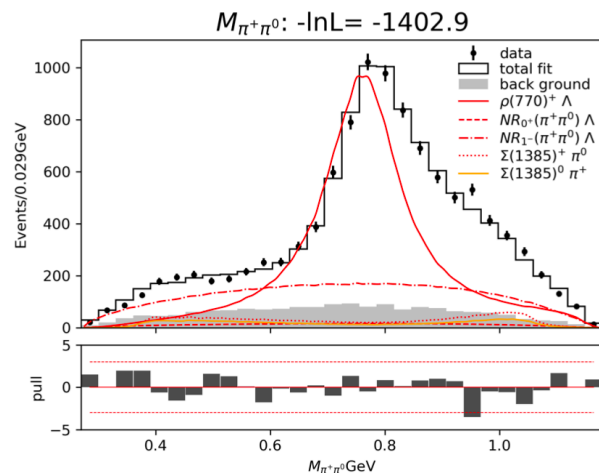
rho(770)xNR(0+) 0.000074 +/- 0.000028

NR(0+)	0.039	-	-	-	-
NR(1-)	0.000	0.400	-	-	-
Sigma(1385)0	-0.000	-0.021	0.059	-	-
Sigma(1385)p	-0.000	-0.004	-0.003	0.091	-
rho(770)	0.000	-0.210	-0.032	-0.054	0.740
Total sum: 1.004794					
Non-interference sum: 1.329					

$$\Sigma(1385)^+, \Sigma(1385)^0$$

$$NR(0^+, 1^-) \rightarrow \pi^+ \pi^0$$

$$\rho(770)^+$$



PWA test with different components

fit fractions

NR(1-) 0.429 +/- 0.023

Sigma(1385)0 0.080 +/- 0.011

Sigma(1385)0xNR(1-) -0.02 +/- 0.01

Sigma(1385)p 0.088 +/- 0.009

Sigma(1385)pxSigma(1385)0 -0.0030 +/- 0.0006

Sigma(1385)pxNR(1-) -0.007 +/- 0.012

rho(770) 0.97 +/- 0.15

rho(770)xSigma(1385)p -0.048 +/- 0.011

rho(770)xSigma(1385)0 -0.037 +/- 0.013

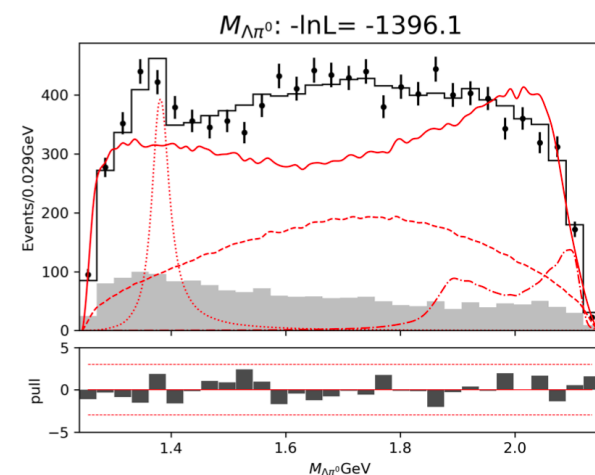
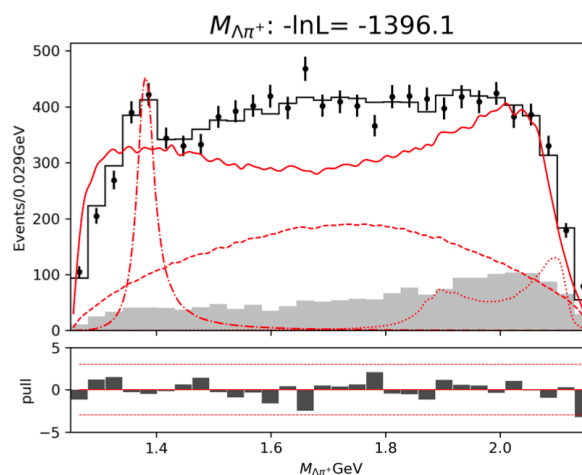
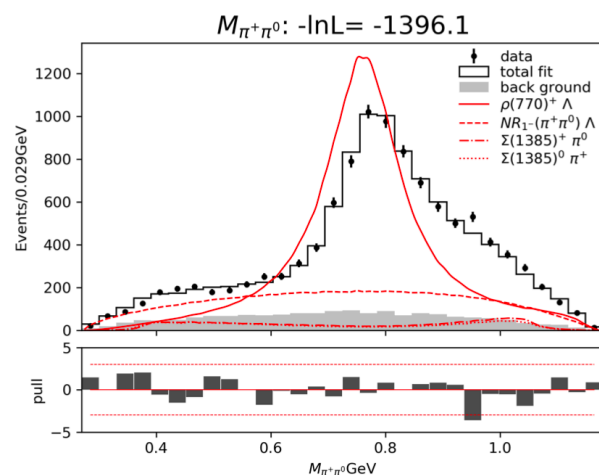
rho(770)xNR(1-) -0.45 +/- 0.15

NR(1-)	0.429	-	-	-
Sigma(1385)0	-0.020	0.080	-	-
Sigma(1385)p	-0.007	-0.003	0.088	-
rho(770)	-0.450	-0.037	-0.048	0.970
Total sum:	1.0019999999999999			
Non-interference sum:	1.567			

$$\Sigma(1385)^+, \Sigma(1385)^0$$

$$NR(1^-) \rightarrow \pi^+ \pi^0$$

$$\rho(770)^+$$



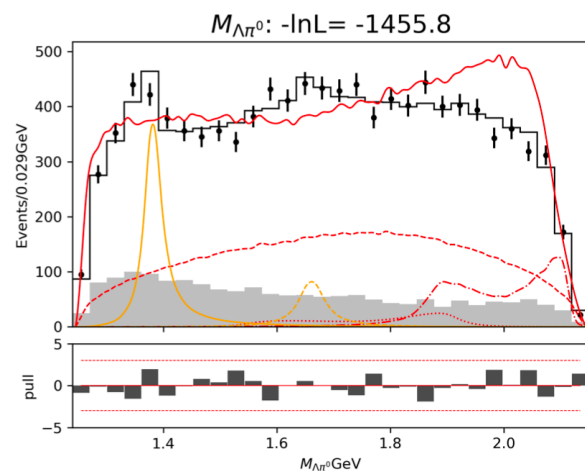
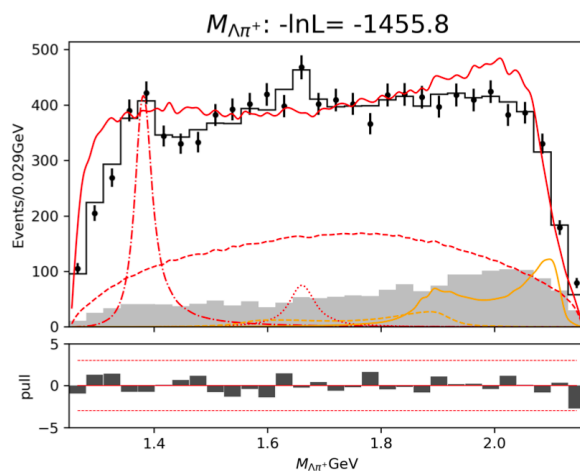
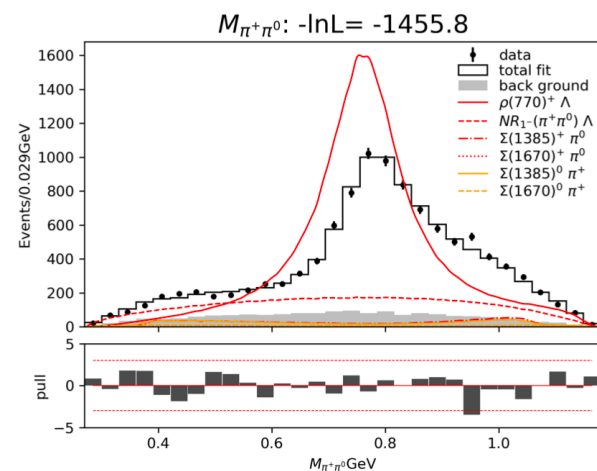
PWA test with different components

fit fractions

NR(1-) 0.403 +/- 0.028
 Sigma(1385)0 0.075 +/- 0.009
 Sigma(1385)0xNR(1-) -0.016 +/- 0.007
 Sigma(1385)p 0.082 +/- 0.008
 Sigma(1385)pxSigma(1385)0 -0.0030 +/- 0.0004
 Sigma(1385)pxNR(1-) -0.020 +/- 0.008
 Sigma(1670)0 0.024 +/- 0.006
 Sigma(1670)0xSigma(1385)p -0.0013 +/- 0.0012
 Sigma(1670)0xSigma(1385)0 0.000005 +/- 0.000010
 Sigma(1670)0xNR(1-) 0.0001 +/- 0.0035
 Sigma(1670)p 0.022 +/- 0.005
 Sigma(1670)pxSigma(1670)0 0.00022 +/- 0.00023
 Sigma(1670)pxSigma(1385)p 0.00002 +/- 0.00001
 Sigma(1670)pxSigma(1385)0 -0.0007 +/- 0.0009
 Sigma(1670)pxNR(1-) 0.0019 +/- 0.0028
 rho(770) 1.21 +/- 0.05
 rho(770)xSigma(1670)p 0.010 +/- 0.006
 rho(770)xSigma(1670)0 0.003 +/- 0.007
 rho(770)xSigma(1385)p -0.055 +/- 0.009
 rho(770)xSigma(1385)0 -0.058 +/- 0.008
 rho(770)xNR(1-) -0.68 +/- 0.06

NR(1-)	0.403	-	-	-	-	-
Sigma(1385)0	-0.016	0.075	-	-	-	-
Sigma(1385)p	-0.020	-0.003	0.082	-	-	-
Sigma(1670)0	0.000	0.000	-0.001	0.024	-	-
Sigma(1670)p	0.002	-0.001	0.000	0.000	0.022	-
rho(770)	-0.680	-0.058	-0.055	0.003	0.010	1.210
Total sum:	0.9972449999999999					
Non-interference sum:	1.816					

$\Sigma(1385)^+, \Sigma(1385)^0$
 $NR(1^-) \rightarrow \pi^+ \pi^0$
 $\Sigma(1670)^+, \Sigma(1670)^0$
 $\rho(770)^+$



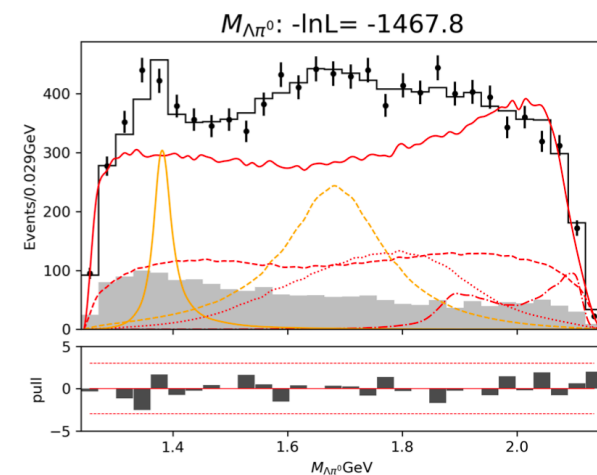
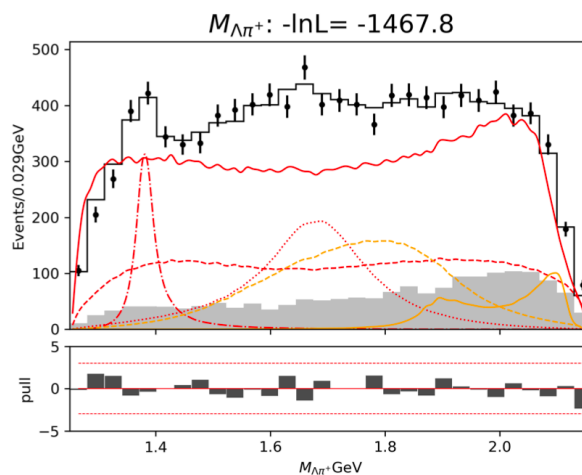
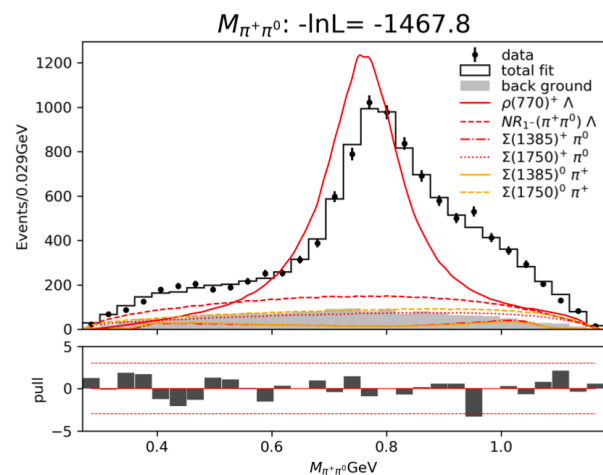
PWA test with different components

fit fractions

NR(1-) 0.35 +/- 0.08
 Sigma(1385)0 0.061 +/- 0.008
 Sigma(1385)0xNR(1-) -0.004 +/- 0.008
 Sigma(1385)p 0.060 +/- 0.008
 Sigma(1385)pxSigma(1385)0 -0.0005 +/- 0.0006
 Sigma(1385)pxNR(1-) 0.004 +/- 0.007
 Sigma(1750)0 0.23 +/- 0.04
 Sigma(1750)0xSigma(1385)p -0.0040 +/- 0.0013
 Sigma(1750)0xSigma(1385)0 0.00003 +/- 0.00005
 Sigma(1750)0xNR(1-) -0.09 +/- 0.05
 Sigma(1750)p 0.185 +/- 0.033
 Sigma(1750)pxSigma(1750)0 -0.029 +/- 0.011
 Sigma(1750)pxSigma(1385)p 0.00014 +/- 0.00004
 Sigma(1750)pxSigma(1385)0 -0.004 +/- 0.001
 Sigma(1750)pxNR(1-) -0.07 +/- 0.04
 rho(770) 0.92 +/- 0.09
 rho(770)xSigma(1750)p -0.146 +/- 0.035
 rho(770)xSigma(1750)0 -0.163 +/- 0.035
 rho(770)xSigma(1385)p -0.033 +/- 0.008
 rho(770)xSigma(1385)0 -0.03 +/- 0.01
 rho(770)xNR(1-) -0.2 +/- 0.1

NR(1-)	0.350	-	-	-	-	-
Sigma(1385)0	-0.004	0.061	-	-	-	-
Sigma(1385)p	0.004	-0.001	0.060	-	-	-
Sigma(1750)0	-0.090	0.000	-0.004	0.230	-	-
Sigma(1750)p	-0.070	-0.004	0.000	-0.029	0.185	-
rho(770)	-0.200	-0.030	-0.033	-0.163	-0.146	0.920
Total sum:	1.03667					
Non-interference sum:	1.806					

$\Sigma(1385)^+, \Sigma(1385)^0$
 $NR(1^-) \rightarrow \pi^+ \pi^0$
 $\Sigma(1750)^+, \Sigma(1750)^0$
 $\rho(770)^+$



PWA test with different components (Model Independent)

fit fractions

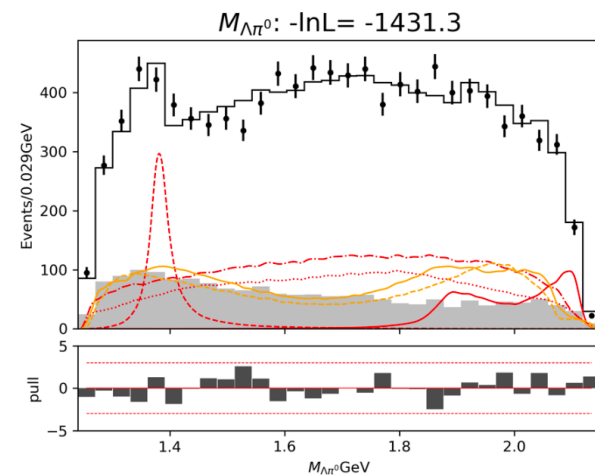
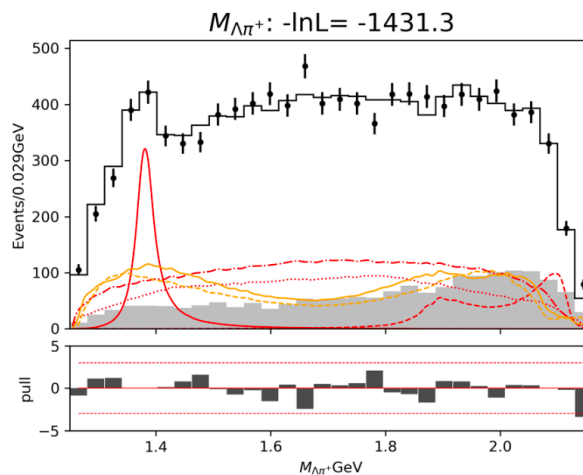
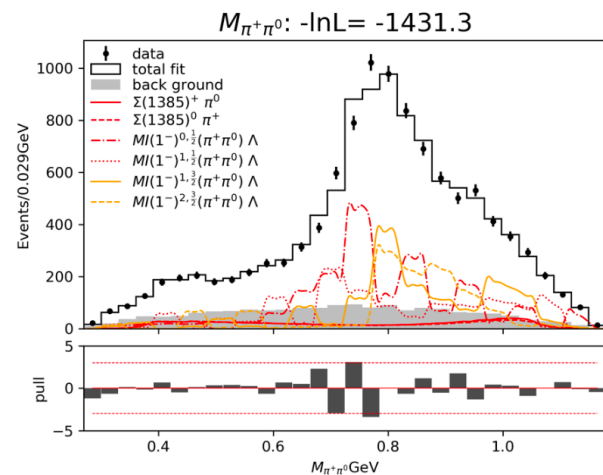
MI(1-)D3H 0.2 +/- 0.1
MI(1-)P1H 0.23 +/- 0.09
MI(1-)P1HxMI(1-)D3H 0.00000000000000003 +/- 0.000000000000000013
MI(1-)P3H 0.25 +/- 0.12
MI(1-)P3HxMI(1-)P1H -0.0000 +/- 0.0012
MI(1-)P3HxMI(1-)D3H -0.000000000000000028 +/- 0.000000000000000035
MI(1-)S1H 0.31 +/- 0.11
MI(1-)S1HxMI(1-)P3H -0.000000000000000014 +/- 0.000000000000000017
MI(1-)S1HxMI(1-)P1H -0.000000000000000014 +/- 0.000000000000000014
MI(1-)S1HxMI(1-)D3H -0.0001 +/- 0.0014
Sigma(1385)0 0.060 +/- 0.007
Sigma(1385)0xMI(1-)S1H -0.000 +/- 0.007
Sigma(1385)0xMI(1-)P3H -0.037 +/- 0.020
Sigma(1385)0xMI(1-)P1H -0.015 +/- 0.011
Sigma(1385)0xMI(1-)D3H -0.012 +/- 0.011
Sigma(1385)p 0.062 +/- 0.009
Sigma(1385)pxSigma(1385)0 -0.0005 +/- 0.0014
Sigma(1385)pxMI(1-)S1H 0.002 +/- 0.013
Sigma(1385)pxMI(1-)P3H -0.012 +/- 0.023
Sigma(1385)pxMI(1-)P1H -0.013 +/- 0.009
Sigma(1385)pxMI(1-)D3H -0.025 +/- 0.016

$$\Sigma(1385)^+, \Sigma(1385)^0$$

$$MI(1^-) \rightarrow \pi^+ \pi^0$$

J: 1
P: -1
mass: 0.7
model: interp_hist
min_m: 0.27
max_m: 1.18
interp_N: 20

MI(1-)D3H	0.200	-	-	-	-	-
MI(1-)P1H	0.000	0.230	-	-	-	-
MI(1-)P3H	-0.000	-0.000	0.250	-	-	-
MI(1-)S1H	-0.000	-0.000	-0.000	0.310	-	-
Sigma(1385)0	-0.012	-0.015	-0.037	-0.000	0.060	-
Sigma(1385)p	-0.025	-0.013	-0.012	0.002	-0.001	0.062
Total sum:	0.9993999999999999					
Non-interference sum:	1.112					



PWA test with different components (Model Independent)

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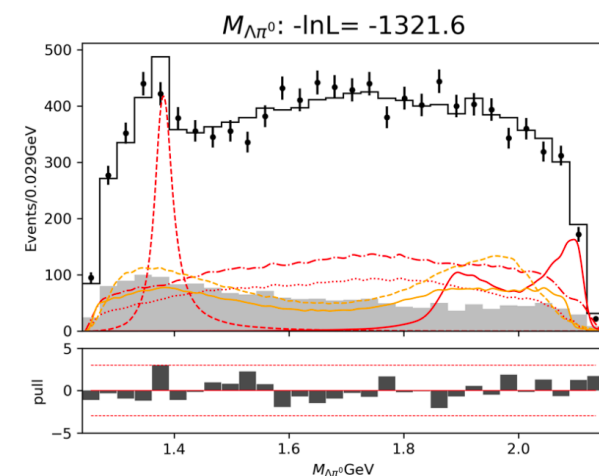
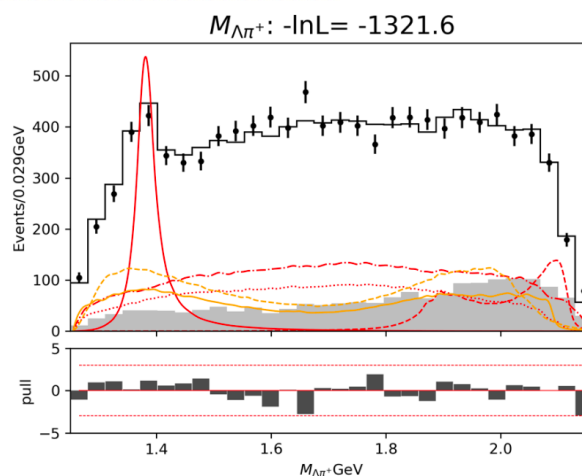
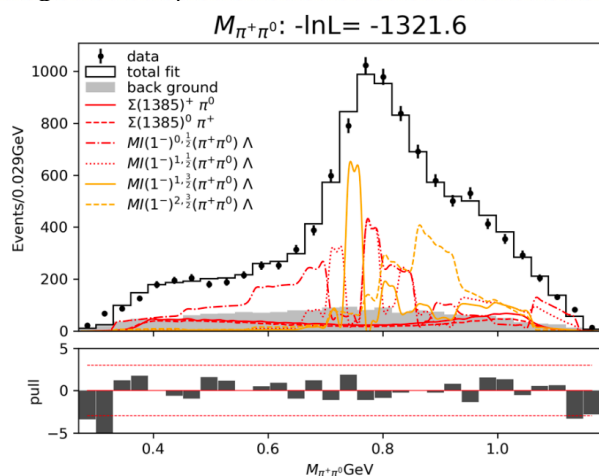
model: interp_hist
points: [0.27, 0.39, 0.51, 0.63, 0.69, 0.72, 0.75, 0.78, 0.81, 0.84, 0.87, 0.90, 0.96, 1.02, 1.10, 1.18]
##### fit fractions
MI(1-)D3H 0.25 +/- 0.07
MI(1-)P1H 0.22 +/- 0.08
MI(1-)P1HxMI(1-)D3H -0.00000000000000006 +/- 0.00000000000000005
MI(1-)P3H 0.18 +/- 0.06
MI(1-)P3HxMI(1-)P1H -0.0001 +/- 0.0007
MI(1-)P3HxMI(1-)D3H 0.00000000000000006 +/- 0.00000000000000005
MI(1-)S1H 0.33 +/- 0.09
MI(1-)S1HxMI(1-)P3H -0.00000000000000003 +/- 0.00000000000000007
MI(1-)S1HxMI(1-)P1H 0.00000000000000001 +/- 0.00000000000000001
MI(1-)S1HxMI(1-)D3H 0.0009 +/- 0.0006
Sigma(1385)0 0.084 +/- 0.011
Sigma(1385)0xMI(1-)S1H -0.038 +/- 0.013
Sigma(1385)0xMI(1-)P3H -0.000 +/- 0.007
Sigma(1385)0xMI(1-)P1H -0.009 +/- 0.007
Sigma(1385)0xMI(1-)D3H -0.041 +/- 0.009
Sigma(1385)p 0.10 +/- 0.01
Sigma(1385)pxSigma(1385)0 0.00171 +/- 0.00029
Sigma(1385)pxMI(1-)S1H -0.042 +/- 0.014
Sigma(1385)pxMI(1-)P3H -0.017 +/- 0.012
Sigma(1385)pxMI(1-)P1H 0.009 +/- 0.008
Sigma(1385)pxMI(1-)D3H -0.043 +/- 0.011

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	MI(1-)D3H	MI(1-)P1H	MI(1-)P3H	MI(1-)S1H	Sigma(1385)0	Sigma(1385)p	Total sum	Non-interference sum
MI(1-)D3H	0.250	-	-	-	-	-	0.250	-
MI(1-)P1H	-0.000	0.220	-	-	-	-	0.220	-
MI(1-)P3H	0.000	-0.000	0.180	-	-	-	0.180	-
MI(1-)S1H	0.001	0.000	-0.000	0.330	-	-	0.330	-
Sigma(1385)0	-0.041	-0.009	-0.000	-0.038	0.084	-	-0.009	0.084
Sigma(1385)p	-0.043	0.009	-0.017	-0.042	0.002	0.100	-0.017	0.100
Total sum	0.98551						0.98551	
Non-interference sum	1.1640000000000001						1.1640000000000001	

$$\Sigma(1385)^+, \Sigma(1385)^0$$

$$MI(1^-) \rightarrow \pi^+ \pi^0$$



PWA test with different components (Model Independent)

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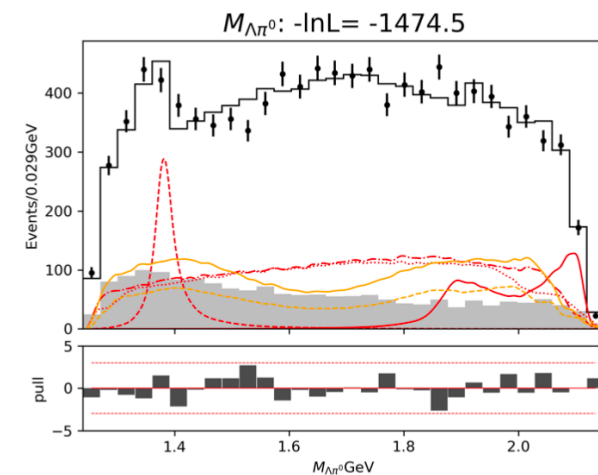
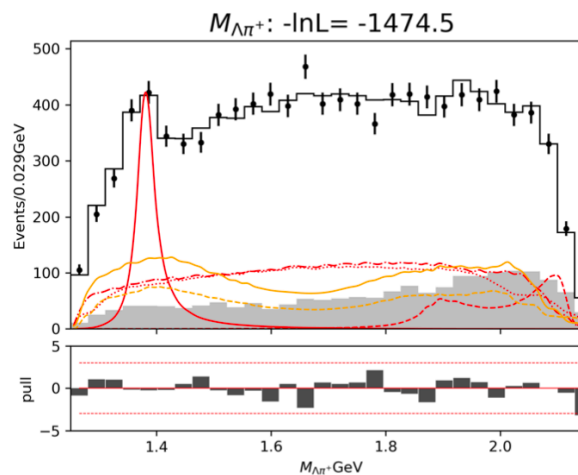
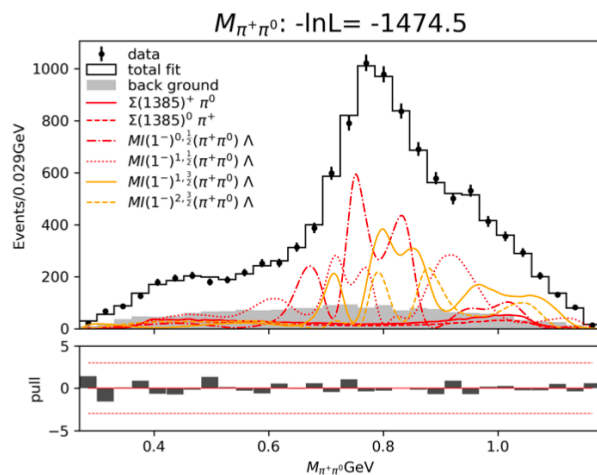
model: spline_c
with_bound: True
points: [0.27, 0.39, 0.51, 0.63, 0.69, 0.72, 0.75, 0.78, 0.81, 0.84, 0.87, 0.90, 0.96, 1.02, 1.10, 1.18]
##### fit fractions
MI(1-)D3H 0.16 +/- 0.12
MI(1-)P1H 0.28 +/- 0.09
MI(1-)P1HxMI(1-)D3H 0.0000000000000000 +/- 0.0000000000000000
MI(1-)P3H 0.30 +/- 0.15
MI(1-)P3HxMI(1-)P1H 0.0004 +/- 0.0007
MI(1-)P3HxMI(1-)D3H 0.0000000000000001 +/- 0.0000000000000001
MI(1-)S1H 0.29 +/- 0.10
MI(1-)S1HxMI(1-)P3H -0.0000000000000006 +/- 0.0000000000000004
MI(1-)S1HxMI(1-)P1H 0.0000000000000011 +/- 0.0000000000000020
MI(1-)S1HxMI(1-)D3H -0.0006 +/- 0.0007
Sigma(1385)0 0.058 +/- 0.011
Sigma(1385)0xMI(1-)S1H -0.000 +/- 0.015
Sigma(1385)0xMI(1-)P3H -0.035 +/- 0.015
Sigma(1385)0xMI(1-)P1H -0.020 +/- 0.017
Sigma(1385)0xMI(1-)D3H -0.021 +/- 0.018
Sigma(1385)p 0.081 +/- 0.013
Sigma(1385)pxSigma(1385)0 -0.0009 +/- 0.0013
Sigma(1385)pxMI(1-)S1H -0.018 +/- 0.015
Sigma(1385)pxMI(1-)P3H -0.029 +/- 0.029
Sigma(1385)pxMI(1-)P1H -0.025 +/- 0.019
Sigma(1385)pxMI(1-)D3H -0.025 +/- 0.029

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$\Sigma(1385)^+, \Sigma(1385)^0$
 $MI(1^-) \rightarrow \pi^+ \pi^0$

不同插值方式对 Σ^* 的fraction比较大

MI(1-)D3H	0.160	-	-	-	-	-	-
MI(1-)P1H	0.000	0.280	-	-	-	-	-
MI(1-)P3H	0.000	0.000	0.300	-	-	-	-
MI(1-)S1H	-0.001	0.000	-0.000	0.290	-	-	-
Sigma(1385)0	-0.021	-0.020	-0.035	-0.000	0.058	-	-
Sigma(1385)p	-0.025	-0.025	-0.029	-0.018	-0.001	0.081	-
Total sum:	0.9949000000000001						
Non-interference sum:	1.169						



Possible Resonances

$\Sigma(1660)1/2^+$

Pole parameters			Breit-Wigner parameters	
$M=1585\pm 20$			$M=1665\pm 20$	
$\Gamma = 290^{+140}_{-40}$			$\Gamma = 300^{+140}_{-40}$	
norm. tran. res. (%) for $\bar{K}N \rightarrow$			Branchings (%)	
$N\bar{K}$	(7 ± 3)	$-(165\pm 35)^\circ$	$\text{Br}(N\bar{K})$	7 ± 3
$\Sigma\pi$	(17 ± 4)	$(150\pm 20)^\circ$	$\text{Br}(\Sigma\pi)$	37 ± 10
$\Lambda\pi$	(16 ± 5)	$(0\pm 25)^\circ$	$\text{Br}(\Lambda\pi)$	35 ± 12
$\Lambda(1405)\pi$	(6 ± 3)	$-(90\pm 25)^\circ$	$\text{Br}(\Lambda(1405)\pi)$	4 ± 2
$\Sigma\sigma$	(14 ± 6)	$-(150\pm 30)^\circ$	$\text{Br}(\Sigma\sigma)$	20 ± 8
$\Lambda^*\pi$	(4 ± 2)	$(5\pm 20)^\circ$	$\text{Br}(\Lambda^*\pi)$	<1

$\Sigma(1750)1/2^-$

Pole parameters			Breit-Wigner parameters	
$M=1689\pm 11$			$M=1692\pm 11$	
$\Gamma=206\pm 18$			$\Gamma=208\pm 18$	
norm. tran. res. (%) for $\bar{K}N \rightarrow$			Branchings (%)	
$N\bar{K}$	(46 ± 9)	$-(144\pm 15)^\circ$	$\text{Br}(N\bar{K})$	46 ± 9
$\Sigma\pi$	(27 ± 5)	$(100\pm 18)^\circ$	$\text{Br}(\Sigma\pi)$	16 ± 4
$\Sigma\eta$	(5 ± 3)		$\text{Br}(\Sigma\eta)$	0
$\Lambda\pi$	(26 ± 6)	$(115\pm 15)^\circ$	$\text{Br}(\Lambda\pi)$	14 ± 5
ΞK	(2 ± 2)		$\text{Br}(\Xi K)$	0
$\Lambda^*\pi$	(15 ± 7)	$-(25\pm 40)^\circ$	$\text{Br}(\Lambda^*\pi)$	2 ± 1
$\Sigma^*\pi$	(4 ± 3)		$\text{Br}(\Sigma^*\pi)$	<1
$N\bar{K}_S^*$	(5 ± 3)	$-(100\pm 35)^\circ$	$\text{Br}(N\bar{K}_S^*)$	0
$N\bar{K}_D^*$	(2 ± 2)		$\text{Br}(N\bar{K}_D^*)$	0

$\Sigma(1670)3/2^-$

Pole parameters			Breit-Wigner parameters	
$M=1661\pm 3$			$M=1665\pm 3$	
$\Gamma = 52\pm 6$			$\Gamma=54\pm 6$	
norm. tran. res. (%) for $\bar{K}N \rightarrow$			Branchings (%)	
$N\bar{K}$	(10 ± 2)	$-(31\pm 12)^\circ$	$\text{Br}(N\bar{K})$	10 ± 2
$\Sigma\pi$	(25 ± 5)	$-(25\pm 10)^\circ$	$\text{Br}(\Sigma\pi)$	70 ± 15
$\Lambda\pi$	(9 ± 3)	$-(52\pm 12)^\circ$	$\text{Br}(\Lambda\pi)$	9 ± 2
ΞK	(2 ± 1)	$(160\pm 20)^\circ$	$\text{Br}(\Xi K)$	0
$\Lambda(1405)\pi$	(3 ± 2)	$(160\pm 15)^\circ$	$\text{Br}(\Lambda(1405)\pi)$	1 ± 1
$\Sigma\sigma$	(8 ± 3)	$-(25\pm 15)^\circ$	$\text{Br}(\Sigma\sigma)$	7 ± 3
$\Lambda^*\pi_P$	(4 ± 2)	$(120\pm 20)^\circ$	$\text{Br}(\Lambda^*\pi_P)$	~ 1
$\Lambda^*\pi_F$	(1 ± 1)		$\text{Br}(\Lambda^*\pi_F)$	0
$\Delta\bar{K}_D$	(1 ± 1)		$\text{Br}(\Delta\bar{K}_D)$	0

$\Sigma(1775)5/2^-$

Pole parameters			Breit-Wigner parameters	
$M=1767\pm 4$			$M=1776\pm 4$	
$\Gamma=122\pm 8$			$\Gamma=124\pm 8$	
norm. tran. res. (%) for $\bar{K}N \rightarrow$			Branchings (%)	
$N\bar{K}$	(44 ± 9)	$-(17\pm 10)^\circ$	$\text{Br}(N\bar{K})$	43 ± 9
$\Sigma\pi$	(13 ± 3)	$(10\pm 12)^\circ$	$\text{Br}(\Sigma\pi)$	3.5 ± 1.0
$\Lambda\pi$	(47 ± 10)	$(130\pm 15)^\circ$	$\text{Br}(\Lambda\pi)$	49 ± 10
ΞK	(2 ± 1)	$-(90\pm 35)^\circ$	$\text{Br}(\Xi K)$	0
$\Lambda^*\pi_P$	(9 ± 3)	$(10\pm 30)^\circ$	$\text{Br}(\Lambda^*\pi_P)$	2 ± 1
$\Lambda^*\pi_F$	(1 ± 1)		$\text{Br}(\Lambda^*\pi_F)$	~ 0
$\Delta\bar{K}_D$	(2 ± 2)		$\text{Br}(\Delta\bar{K}_D)$	~ 0
$N\bar{K}_{D1/2}^*$	(4 ± 2)	$-(100\pm 60)^\circ$	$\text{Br}(N\bar{K}_{D1/2}^*)$	0
$N\bar{K}_{D3/2}^*$	(9 ± 6)	$(10\pm 50)^\circ$	$\text{Br}(N\bar{K}_{D3/2}^*)$	0
$N\bar{K}_{G3/2}^*$	(4 ± 2)	$-(100\pm 60)^\circ$	$\text{Br}(N\bar{K}_{D1/2}^*)$	0

Possible Resonances

$\Sigma(1940)3/2^-$

1910

$\Sigma(1915)5/2^+$

Pole parameters			Breit-Wigner parameters	
$M=1856\pm 10$	$\Gamma=220\pm 22$		$M=1878\pm 12$	$\Gamma=224\pm 25$
norm. tran. res. (%) for $\bar{K}N \rightarrow$			Branchings (%)	
$N\bar{K}$	(3 ± 2)	$-(95\pm 60)^\circ$	$\text{Br}(N\bar{K})$	3 ± 2
$\Sigma\pi$	(16 ± 4)	$-(160\pm 15)^\circ$	$\text{Br}(\Sigma\pi)$	86 ± 21
$\Lambda\pi$	(4 ± 3)	$(25\pm 25)^\circ$	$\text{Br}(\Lambda\pi)$	6 ± 4
ΞK	(1 ± 1)		$\text{Br}(\Xi K)$	~ 0

$\Sigma(2030)7/2^+$

Pole parameters			Breit-Wigner parameters	
$M=2014\pm 6$		$\Gamma=172\pm 12$	$M=2032\pm 6$	$\Gamma=177\pm 12$
norm. tran. res. (%) for $\bar{K}N \rightarrow$			Branchings (%)	
$N\bar{K}$	(20 ± 4)	$-(38\pm 8)^\circ$	$\text{Br}(N\bar{K})$	20 ± 4
$\Sigma\pi$	(7 ± 2)	$(165\pm 12)^\circ$	$\text{Br}(\Sigma\pi)$	2.5 ± 0.8
$\Lambda\pi$	(18 ± 4)	$-(22\pm 12)^\circ$	$\text{Br}(\Lambda\pi)$	17 ± 4
ΞK	(1 ± 1)		$\text{Br}(\Xi K)$	< 1
$\Lambda^*\pi_D$	(3 ± 2)	$-(100\pm 40)^\circ$	$\text{Br}(\Lambda^*\pi_D)$	~ 1
$\Lambda^*\pi_G$	(2 ± 2)		$\text{Br}(\Lambda^*\pi_G)$	< 1
$\Sigma^*\pi_F$	(4 ± 3)		$\text{Br}(\Sigma^*\pi_F)$	1 ± 1
$\Delta\bar{K}_F$	(16 ± 6)	$-(130\pm 20)^\circ$	$\text{Br}(\Delta\bar{K}_F)$	15 ± 5
$\Delta\bar{K}_H$	(4 ± 2)	$-(130\pm 35)^\circ$	$\text{Br}(\Delta\bar{K}_H)$	1 ± 1
$N\bar{K}_{F1/2}^*$	(2 ± 2)		$\text{Br}(N\bar{K}_{F1/2}^*)$	< 1
$N\bar{K}_{F3/2}^*$	(16 ± 9)	$-(160\pm 40)^\circ$	$\text{Br}(N\bar{K}_{F3/2}^*)$	14 ± 8

Pole parameters			Breit-Wigner parameters	
$M=1908\pm 7$	$\Gamma=98\pm 12$		$M=1918\pm 6$	$\Gamma=102\pm 12$
norm. tran. res. (%) for $\bar{K}N \rightarrow$			Branchings (%)	
$N\bar{K}$	(8 ± 2)	$-(33\pm 15)^\circ$	$\text{Br}(N\bar{K})$	8 ± 2
$\Sigma\pi$	(9 ± 2)	$-(180\pm 12)^\circ$	$\text{Br}(\Sigma\pi)$	10 ± 2
$\Lambda\pi$	(7 ± 2)	$-(170\pm 20)^\circ$	$\text{Br}(\Lambda\pi)$	6 ± 2
ΞK	(2 ± 1)	$-(65\pm 35)^\circ$	$\text{Br}(\Xi K)$	< 1
$\Lambda^*\pi_D$	(8 ± 2)	$-(105\pm 50)^\circ$	$\text{Br}(\Lambda^*\pi_D)$	8 ± 2
$\Lambda^*\pi_G$	(1 ± 1)		$\text{Br}(\Lambda^*\pi_G)$	~ 0
$\Sigma^*\pi_P$	(2 ± 2)		$\text{Br}(\Lambda^*\pi_P)$	2 ± 2
$\Sigma^*\pi_F$	(5 ± 3)	$-(30\pm 50)^\circ$	$\text{Br}(\Lambda^*\pi_F)$	4 ± 2
$\Delta\bar{K}_P$	(12 ± 3)	$-(10\pm 20)^\circ$	$\text{Br}(\Delta\bar{K}_P)$	16 ± 5
$\Delta\bar{K}_F$	(7 ± 2)	$-(35\pm 25)^\circ$	$\text{Br}(\Delta\bar{K}_F)$	5 ± 3
$N\bar{K}_{F1/2}^*$	(7 ± 4)	$-(60\pm 45)^\circ$	$\text{Br}(N\bar{K}_{F1/2}^*)$	5 ± 3
$N\bar{K}_{F3/2}^*$	(7 ± 3)	$-(40\pm 45)^\circ$	$\text{Br}(N\bar{K}_{F3/2}^*)$	5 ± 2