

Mainz Meeting

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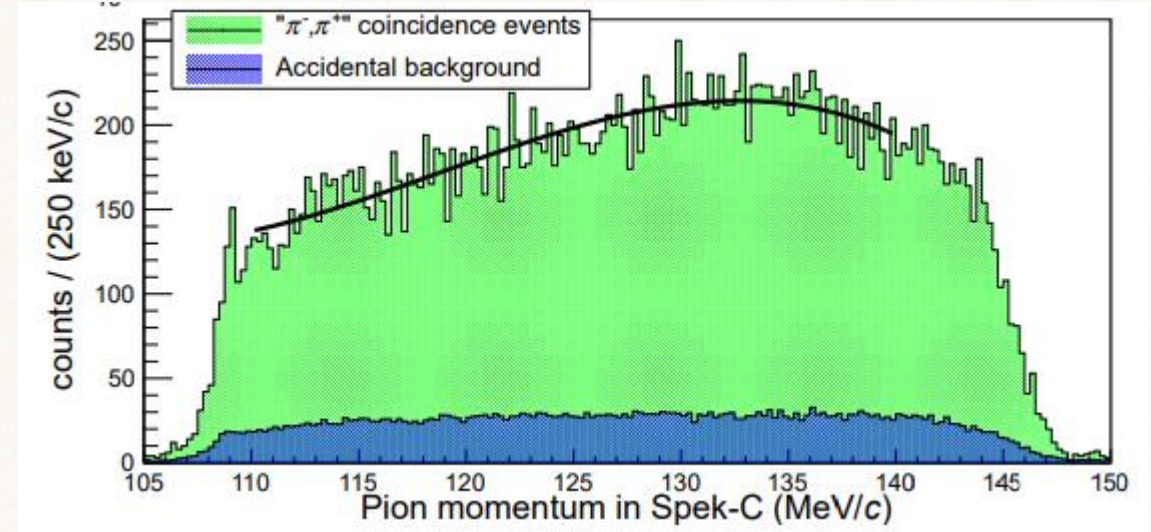
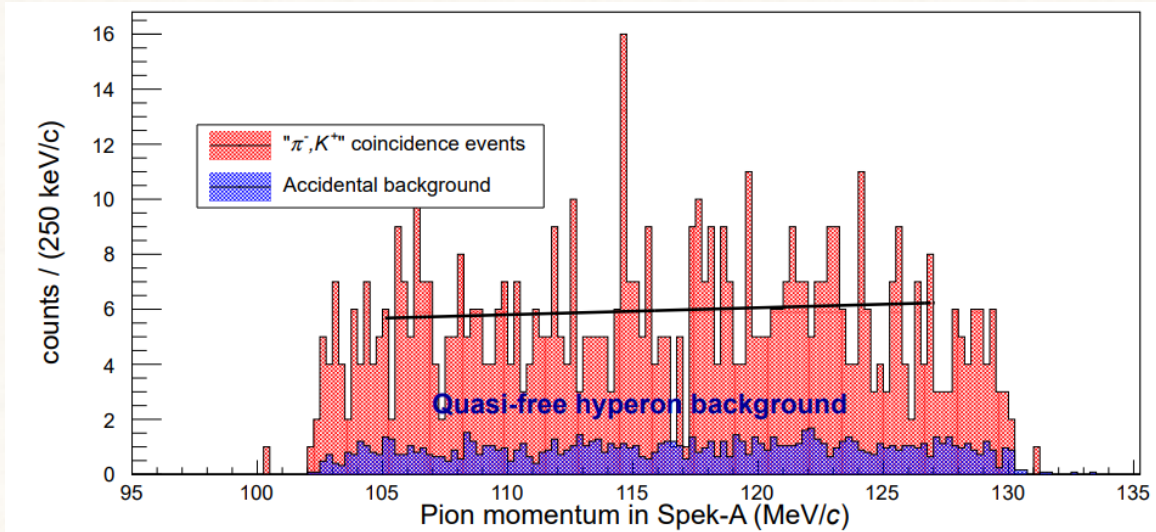
- Comments
 - Preparation Works
 - Target

Tohoku University

Sho Nagao

2022/07/05

Momentum Distribution (2012)



Momentum Setting

Hypernuclei	Decay mode	p_{π^-} (MeV/c)	comments
${}^3_{\Lambda}\text{H}$	${}^3\text{He} + \pi^-$	114.37	
${}^4_{\Lambda}\text{H}$	${}^4\text{He} + \pi^-$	133.03	
${}^4_{\Lambda}\text{He}$	${}^4\text{Li} + \pi^-$	98.17	$\Gamma_{1/2} = 9.1 \times 10^{-23}$ s (6.03 MeV)
${}^5_{\Lambda}\text{He}$	${}^5\text{Li} + \pi^-$	99.26	$\Gamma_{1/2} = 3.7 \times 10^{-22}$ s (1.5 MeV)
${}^6_{\Lambda}\text{H}$	${}^6\text{He} + \pi^-$	135.27	*
${}^6_{\Lambda}\text{He}$	${}^6\text{Li} + \pi^-$	108.48	*
${}^6_{\Lambda}\text{Li}$	${}^6\text{Be} + \pi^-$	-	★★
${}^7_{\Lambda}\text{He}$	${}^7\text{Li} + \pi^-$	114.77	

Momentum Acceptance (Hyper2012)

	Min.	Central	Max.
Spek-A (MeV)	104 (-9.5%)	115	128 (+11.3%)
Spek-C (MeV)	109 (-12.8%)	125	142 (+13.6%)

Momentum Setting

Hypernuclei	Decay mode	p_{π^-} (MeV/c)	comments
${}^3_{\Lambda}\text{H}$	${}^3\text{He} + \pi^-$	114.37	
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${}^6_{\Lambda}\text{Li}$	${}^6\text{Be} + \pi^-$	-	★★
${}^7_{\Lambda}\text{He}$	${}^7\text{Li} + \pi^-$	114.77	

Momentum Acceptance (Hyper2021)

	Min.	Central	Max.
Spek-A (MeV)	109 (-9.5%)	120	134 (+11.3%)
Spek-C (MeV)	105 (-12.8%)	120	136 (+13.6%)