

p(e,e' π)n Run Sheet

can be found at lichen.phys.uregina.ca/~huberg/fpi/

Date: 220819
yy mm dd

Initials: SALV

Use a separate sheet for each configuration.

Configuration Name: _____

$Q^2 = 3.85$ $W = 2.62$

$X = 0.3915$ low E SHMS ref

E_{beam}: 6.772 GeV

I_{beam}: 80 μ A

Purpose:

- ☒ Production
☐ Test (e.g. DAQ, Detector)
☐ Optics (SHMS / HMS)
☐ Other: _____

Raster: ☒ On ☐ Off
Size: 2 x 2

Beam position and angle on target:

3H07A	X	Y
-1 mm	-3 mm	
Nomin:	Nomin:	
3H07C	X	Y
-7 mm	-5 mm	
Nomin:	Nomin:	

HMS

SHMS 17/3.3

Q1	I-SET (from PSU) 150.771 A B-HALL	I-SET (from PSU) 1076.51 A B-HALL	HB
Q2	I-SET (from PSU) 0.1971 T B-HALL	I-SET (from PSU) -10.82 kg B-HALL	Q1
Q3	I-SET (from PSU) 119.77 A B-HALL	I-SET (from PSU) 1076.51 A B-HALL	Q2
D	I-SET (from PSU) -0.20419 T B-HALL	I-SET (from PSU) 7.679 kg B-HALL	Q3
	I-SET (from PSU) 55.1489 A B-HALL	I-SET (from PSU) 1808.2 A B-HALL	D
	I-SET (from PSU) 0.11149 T B-HALL	I-SET (from PSU) -17.083 kg B-HALL	
	I-READ 352.50 A B-NMR	I-SET (from PSU) 1189.78 A B-HALL	
	I-READ 31703 T B-NMR	I-SET (from PSU) -11.499 kg B-HALL	
	If momentum increased: ☐ HMS cycled? ☒ SHMS cycled?	I-SET (from PSU) 1635.82 A B-NMR	
		I-SET (from PSU) 11.837 kg B-NMR	

HMS

p: +/- 1.158 θ (TV): 42.23
From GUI Nearest 0.005

SHMS

p: +/- 5.127 θ (TV): 5.127 10.0
From GUI Nearest 0.005

Collimator:

HMS: Large ☒
Sieve ☐

SHMS: Collim ☒
Sieve ☐

Run Number:

16319

- ☒ LH2 10cm
☐ LD2 10cm
☐ Dummy 10cm
☐ C 0.5% r.l.
☐ Optics ____ cm
☐ _____

PS1: 12
PS2: -1
PS3: -1
PS4: 7
PS5: 0
PS6: -1
Mode10: cor / fadc

Start time (RC GUI):

8:54

Stop time (RC GUI):

9:57

- ☒ Settings Verified?
☒ HV OK?
☒ 50k OK?

HMS prescale
pretrig: 104 k

e- π n evts:

755

SHMS prescale
pretrig: 210 k

Σ e- π n evts:

455

COIN pretrig: 109 k

- ☒ Data ok
☐ Junk

Comments:

Some twiddling of HMS dipole current during run to keep B near target.

Run Number:

16320

- ☒ LH2 10cm
☐ LD2 10cm
☐ Dummy 10cm
☐ C 0.5% r.l.
☐ Optics ____ cm
☐ _____

PS1: 12
PS2: -1
PS3: -1
PS4: 7
PS5: 0
PS6: -1
Mode10: cor / fadc

Start time (RC GUI):

9:57:47

Stop time (RC GUI):

10:10:56

- ☒ Settings Verified?
☒ HV OK?
☒ 50k OK?

HMS prescale
pretrig: 20 k

e- π n evts:

84

SHMS prescale
pretrig: 39 k

Σ e- π n evts:

539

COIN pretrig: 21 k

- ☒ Data ok
☐ Junk

Comments:

Beam stopped for RF issue

Run Number:

16321

- ☒ LH2 10cm
☐ LD2 10cm
☐ Dummy 10cm
☐ C 0.5% r.l.
☐ Optics ____ cm
☐ _____

PS1: 12
PS2: -1
PS3: -1
PS4: 6
PS5: 0
PS6: -1
Mode10: cor / fadc

Start time (RC GUI):

11:23:44

Stop time (RC GUI):

12:23:19

- ☒ Settings Verified?
☒ HV OK?
☒ 50k OK?

HMS prescale
pretrig: 199 k

e- π n evts:

504

SHMS prescale
pretrig: 204 k

Σ e- π n evts:

1043

COIN pretrig: 103 k

- ☒ Data ok
☐ Junk

Comments:

Run Number:

16322

- ☐ LH2 10cm
☐ LD2 10cm
☐ Dummy 10cm
☐ C 0.5% r.l.
☐ Optics ____ cm
☐ _____

PS1: 12
PS2: -1
PS3: -1
PS4: -1
PS5: -1
PS6: -1
Mode10: cor / fadc

Start time (RC GUI):

12:24:57

Stop time (RC GUI):

13:28:33

- ☒ Settings Verified?
☒ HV OK?
☐ 50k OK?

HMS prescale
pretrig: 7688

e- π n evts:

550

SHMS prescale
pretrig: 240 k

Σ e- π n evts:

1593

COIN pretrig: 120 k

- ☒ Data ok
☐ Junk

Comments:

HMS 3/4

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can be found at lichen.phys.uregina.ca/~huberg/fpi/

Date: 22, 08, 19
yy mm dd

Initials: S AW

Continuation of Configuration:

$Q^2 = 3.85$ $W = 2.12$
 $x = 0.3915$ low E π HMS

This sheet is only to be used to continue a running configuration.

Run Number: 16323	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: 12 PS2: 1 PS3: 1 PS4: 6 PS5: 9 PS6: 9 Mode10: cer / fadc	Start time (RC GUI): 13:30:02 Stop time (RC GUI): 14:32:50	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale 234 k pretrig: e-πn evts: 574	SHMS prescale 240 k pretrig: Σ e-πn evts: 2167	COIN pretrig: 120 k ☒ Data ok ☐ Junk
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PS6 should be -1

Run Number: 16324	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: 12 PS2: 1 PS3: 1 PS4: 6 PS5: 6 PS6: 1 Mode10: cer / fadc	Start time (RC GUI): 14:33:37 Stop time (RC GUI): 14:36:20	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale 234 k pretrig: e-πn evts: 574	SHMS prescale 240 k pretrig: Σ e-πn evts:	COIN pretrig: k ☐ Data ok ☐ Junk
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FADC MODE 10 PS6 should be -1

Run Number: 16325	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: 12 PS2: 1 PS3: 1 PS4: 6 PS5: 6 PS6: 9 Mode10: cer / fadc	Start time (RC GUI): 14:37:27 Stop time (RC GUI): 15:37:22	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale 222 k pretrig: e-πn evts: 528	SHMS prescale 230 k pretrig: Σ e-πn evts: 2695	COIN pretrig: 114 k ☒ Data ok ☐ Junk
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PS6 should be -1
 $Q = 237.07$
 $\Sigma Q = 1200.892$

Run Number: 16326	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: 12 PS2: 1 PS3: 1 PS4: 6 PS5: 9 PS6: 9 Mode10: cer / fadc	Start time (RC GUI): 15:38:18 Stop time (RC GUI): 16:38	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale 240 k pretrig: e-πn evts: 589	SHMS prescale 250 k pretrig: Σ e-πn evts: 3284	COIN pretrig: 121 k ☒ Data ok ☐ Junk
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PS6 should be -1
 $Q = 256.465$
 $\Sigma Q = 1457.357$

Run Number: 16327	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: 12 PS2: 1 PS3: 1 PS4: 6 PS5: 9 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 16:39 Stop time (RC GUI): 17:43	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale 240 k pretrig: e-πn evts: 598	SHMS prescale 250 k pretrig: Σ e-πn evts: 3882	COIN pretrig: 123 k ☒ Data ok ☐ Junk
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PS6 was set to 1
 $Q = 257.029$
 $\Sigma Q = 1714.386$

Run Number: 16328	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: 12 PS2: 1 PS3: 1 PS4: 6 PS5: 9 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 17:43 Stop time (RC GUI): 18:43	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale 220 k pretrig: e-πn evts: 497	SHMS prescale 228 k pretrig: Σ e-πn evts: 4379	COIN pretrig: 112 k ☒ Data ok ☐ Junk
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After ending run
needed to reformat codes

PS6 was set to 1

$Q = 234.747$
 $\Sigma Q = 1948.133$

$p(e, e'\pi)n$ Run Sheet

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Date: 22/08/19
yy mm dd

Initials: H.M.

Continuation of Configuration:

$Q^2 = 3.85$, $W = 2.62$
 $X = 0.39$, Low ϵ , SHMS left

This sheet is only to be used to continue a running configuration.

Run Number: 16330	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: <u>12</u> PS2: <u>-1</u> PS3: <u>-1</u> PS4: <u>6</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): 18:46 Stop time (RC GUI): 19:47	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS <u>220</u> k prescale pretrig: e- π n evts: 548	SHMS <u>228</u> k prescale pretrig: Σ e- π n evts: 4927	COIN <u>113</u> k pretrig: ☒ Data ok ☐ Junk
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ps6 was set to 1

$Q = 234.695$
 $\Sigma Q = 2183.828$

Run Number: 16331	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: <u>12</u> PS2: <u>-1</u> PS3: <u>-1</u> PS4: <u>6</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): 19:48 Stop time (RC GUI): 20:50	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS <u>219</u> k prescale pretrig: e- π n evts: 548	SHMS <u>228</u> k prescale pretrig: Σ e- π n evts: 5475	COIN <u>114</u> k pretrig: ☒ Data ok ☐ Junk
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ps6 was set to 1

$Q = 234.309$
 $\Sigma Q = 2418.137$

Run Number: 16332	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: <u>12</u> PS2: <u>-1</u> PS3: <u>-1</u> PS4: <u>6</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): 20:51 Stop time (RC GUI): 22:03	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS <u>256</u> k prescale pretrig: e- π n evts: 593	SHMS <u>266</u> k prescale pretrig: Σ e- π n evts: 6068	COIN <u>133</u> k pretrig: ☒ Data ok ☐ Junk
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ps6 was set to 1

$Q = 272.965$
 $\Sigma Q = 2691.102$

Run Number: 16333	☐ LH2 10cm ☒ LD2 10cm ☒ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: <u>9</u> PS2: <u>-1</u> PS3: <u>-1</u> PS4: <u>3</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): 22:13 Stop time (RC GUI): 23:13	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS <u>284</u> k prescale pretrig: e- π n evts: 21	SHMS <u>177</u> k prescale pretrig: Σ e- π n evts: 21	COIN <u>38</u> k pretrig: ☒ Data ok ☐ Junk
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Dummy

ps6 was set to 1

$Q = 113.815$

Run Number: 16334	☐ LH2 10cm ☐ LD2 10cm ☒ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: <u>9</u> PS2: <u>-1</u> PS3: <u>-1</u> PS4: <u>3</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): 23:14 Stop time (RC GUI): 23:50	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS <u>192</u> k prescale pretrig: e- π n evts: 14	SHMS <u>121</u> k prescale pretrig: Σ e- π n evts: 35	COIN <u>23</u> k pretrig: ☒ Data ok ☐ Junk
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Dummy

ps6 was set to 1

$Q = 77.871$
 $\Sigma Q = 191.686$

Run Number: 16335	☐ LH2 10cm ☐ LD2 10cm ☒ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: <u>9</u> PS2: <u>-1</u> PS3: <u>-1</u> PS4: <u>3</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): 23:53 Stop time (RC GUI): 00:19:34	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS <u>139</u> k prescale pretrig: e- π n evts: 4	SHMS <u>87</u> k prescale pretrig: Σ e- π n evts: 39	COIN <u>17</u> k pretrig: ☒ Data ok ☐ Junk
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Dummy

ps6 was set to 1

$Q = 56.134$ mc
 $\Sigma Q = 247.820$

$p(e,e'\pi)n$ Run Sheet

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Date: 22, 08, 20
yy mm dd

Initials: N.S.

Continuation of Configuration:

$Q^2 = 3.85$, $W = 2.62$, $X = 0.3915$

Low Σ , SHMS Left

This sheet is only to be used to continue a running configuration.

Run Number: 16336	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: <u>12</u> PS2: <u>-1</u> PS3: <u>-1</u> PS4: <u>7</u> PS5: <u>0</u> PS6: <u>1</u> Mode10: <u>ce</u> / fadc	Start time (RC GUI): 00:50:09 Stop time (RC GUI): 01:13:33	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 118 k $e-\pi n$ evts: 214	SHMS prescale pretrig: 148 k $\Sigma e-\pi n$ evts: 214	COIN pretrig: 153 k ☒ Data ok ☐ Junk
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80 MA

PS6 should be -1

$Q = 79.632$ mC
 $\Sigma Q = 79.632$

Run Number: 16337	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: <u>12</u> PS2: <u>-1</u> PS3: <u>-1</u> PS4: <u>7</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: <u>ce</u> / fadc	Start time (RC GUI): 01:14:18 Stop time (RC GUI): 02:16:09	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 358 k $e-\pi n$ evts: 653	SHMS prescale pretrig: 431 k $\Sigma e-\pi n$ evts: 867	COIN pretrig: 465 k ☒ Data ok ☐ Junk
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80 MA

$Q = 244.177$ mC
 $\Sigma Q = 323.809$ mC

Run Number: 16338	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: <u>12</u> PS2: <u>-1</u> PS3: <u>-1</u> PS4: <u>7</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: <u>ce</u> / fadc	Start time (RC GUI): 02:16:44 Stop time (RC GUI): 03:17:19	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 313 k $e-\pi n$ evts: 662	SHMS prescale pretrig: 377 k $\Sigma e-\pi n$ evts: 1529	COIN pretrig: 406 k ☒ Data ok ☐ Junk
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80 MA

$Q = 213.851$ mC
 $\Sigma Q = 537.660$

Run Number: 16339	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: <u>12</u> PS2: <u>-1</u> PS3: <u>-1</u> PS4: <u>7</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: <u>ce</u> / fadc	Start time (RC GUI): 03:17:49 Stop time (RC GUI): 04:16:29	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 367 k $e-\pi n$ evts: 708	SHMS prescale pretrig: 442 k $\Sigma e-\pi n$ evts: 2237	COIN pretrig: 478 k ☒ Data ok ☐ Junk
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80 MA

$Q = 250.256$ mC
 $\Sigma Q = 787.916$

Run Number: 16340	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: <u>12</u> PS2: <u>-1</u> PS3: <u>-1</u> PS4: <u>7</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: <u>ce</u> / fadc	Start time (RC GUI): 04:16:46 Stop time (RC GUI): 05:16:15	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 369 k $e-\pi n$ evts: 784	SHMS prescale pretrig: 444 k $\Sigma e-\pi n$ evts: 2941	COIN pretrig: 481 k ☒ Data ok ☐ Junk
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80 MA

$Q = 251.459$ mC
 $\Sigma Q = 1039.375$

Run Number: 16341	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: <u>12</u> PS2: <u>-1</u> PS3: <u>-1</u> PS4: <u>7</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: <u>ce</u> / fadc	Start time (RC GUI): 05:16:53 Stop time (RC GUI): 06:15:58	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 263 k $e-\pi n$ evts: 547	SHMS prescale pretrig: 314 k $\Sigma e-\pi n$ evts: 3488	COIN pretrig: 345 k ☒ Data ok ☐ Junk
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80 MA

$Q = 177.939$ mC
 $\Sigma Q = 1217.214$

p(e,e' π)n Run Sheet

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Date: 22 / 08 / 20
yy mm dd

Initials: N.S.
SAL

Continuation of Configuration:

$Q^2 = 3.85$, $W = 2.62$, $X = 0.3915$

Low ϵ , SHMS Left

This sheet is only to be used to continue a running configuration.

Run Number: 16342	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: 12 PS2: -1 PS3: -1 PS4: 7 PS5: 0 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 06:16:31 Stop time (RC GUI): 07:16:38	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 315 k $e-\pi n$ evts: 632	SHMS prescale pretrig: 378 k $\Sigma e-\pi n$ evts: 4120	COIN pretrig: 411 k ☒ Data ok ☐ Junk
Comments: 80 MA $Q = 214.019$ mC $\Sigma Q = 1431.233$							

Run Number: 16343	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: 12 PS2: -1 PS3: -1 PS4: 7 PS5: 0 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 07:17:19 Stop time (RC GUI): 08:08:15	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: k $e-\pi n$ evts: 665	SHMS prescale pretrig: k $\Sigma e-\pi n$ evts: 4785	COIN pretrig: k ☒ Data ok ☐ Junk
Comments: 80 MA $Q = 227.678$ $\Sigma Q = 1658.911$							

Run Number: 16344	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: 12 PS2: 4 PS3: 4 PS4: -1 PS5: -1 PS6: 0 Mode10: cer / fadc	Start time (RC GUI): 8:18 Stop time (RC GUI): 8:37	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 8526 k $e-\pi n$ evts: 241	SHMS prescale pretrig: 159 k $\Sigma e-\pi n$ evts: 5026	COIN pretrig: 174 k ☒ Data ok ☐ Junk
Comments: HMS 3/4 $Q = 89.437$ $\Sigma Q = 1748.348$							

Run Number: 16345	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: 12 PS2: -1 PS3: -1 PS4: 7 PS5: 0 PS6: 0 Mode10: cer / fadc	Start time (RC GUI): 8:38:07 Stop time (RC GUI): 8:58:13	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 7806 k $e-\pi n$ evts: 16749	SHMS prescale pretrig: 145 k $\Sigma e-\pi n$ evts: 5245	COIN pretrig: 178 k ☒ Data ok ☐ Junk
Comments: HMS 3/4 $Q = 60.954$ 81.94 $1830.269 \Sigma Q = 60.954$							

Run Number: 16346	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: 12 PS2: -1 PS3: -1 PS4: 7 PS5: -1 PS6: 0 Mode10: cer / fadc	Start time (RC GUI): 8:58:46 Stop time (RC GUI): 9:17:27	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 7041 k $e-\pi n$ evts: 238	SHMS prescale pretrig: 130 k $\Sigma e-\pi n$ evts: 5483	COIN pretrig: 142 k ☒ Data ok ☐ Junk
Comments: HMS 3/4 $Q = 73.303$ $\Sigma Q = 1903.572$							

Run Number: 16347	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: 12 PS2: -1 PS3: -1 PS4: 7 PS5: 0 PS6: 0 Mode10: cer / fadc	Start time (RC GUI): 09:31:39 Stop time (RC GUI): 9:34:38	☒ Settings Verified? ☒ HV OK? ☐ 50k OK?	HMS prescale pretrig: k $e-\pi n$ evts:	SHMS prescale pretrig: k $\Sigma e-\pi n$ evts:	COIN pretrig: k ☐ Data ok ☐ Junk
Comments: fadc mode 10							

$p(e,e'\pi)n$ Run Sheet

can be found at lichen.phys.uregina.ca/~huberg/fpi/

Date: 22/08/20
yy mm dd

Initials: SAY

Continuation of Configuration:

$Q^2 = 3.85$ $W = 262$ $x = 0.3915$

LowE SAMS left

This sheet is only to be used to continue a running configuration.

Run Number: <u>16348</u>	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: <u>12</u> PS2: <u>=1</u> PS3: <u>=1</u> PS4: <u>7</u> PS5: <u>0</u> PS6: <u>=1</u> Mode10: cer / fadc	Start time (RC GUI): <u>9:35:17</u> Stop time (RC GUI): <u>10:36:10</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale <u>384</u> k pretrig: _____ $e-\pi n$ evts: <u>748</u>	SHMS prescale <u>462</u> k pretrig: _____ $\Sigma e-\pi n$ evts: <u>6231</u>	COIN pretrig: <u>513</u> k ☒ Data ok ☐ Junk
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Comments:

$Q = 260.624$
 $\Sigma Q = 2164.196$

Run Number:	☐ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____ Mode10: cer / fadc	Start time (RC GUI): Stop time (RC GUI):	☐ Settings Verified? ☐ HV OK? ☐ 50k OK?	HMS prescale _____ k pretrig: _____ $e-\pi n$ evts: _____	SHMS prescale _____ k pretrig: _____ $\Sigma e-\pi n$ evts: _____	COIN pretrig: _____ k ☐ Data ok ☐ Junk
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Comments:

Run Number:	☐ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____ Mode10: cer / fadc	Start time (RC GUI): Stop time (RC GUI):	☐ Settings Verified? ☐ HV OK? ☐ 50k OK?	HMS prescale _____ k pretrig: _____ $e-\pi n$ evts: _____	SHMS prescale _____ k pretrig: _____ $\Sigma e-\pi n$ evts: _____	COIN pretrig: _____ k ☐ Data ok ☐ Junk
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Comments:

Run Number:	☐ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____ Mode10: cer / fadc	Start time (RC GUI): Stop time (RC GUI):	☐ Settings Verified? ☐ HV OK? ☐ 50k OK?	HMS prescale _____ k pretrig: _____ $e-\pi n$ evts: _____	SHMS prescale _____ k pretrig: _____ $\Sigma e-\pi n$ evts: _____	COIN pretrig: _____ k ☐ Data ok ☐ Junk
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Comments:

Run Number:	☐ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____ Mode10: cer / fadc	Start time (RC GUI): Stop time (RC GUI):	☐ Settings Verified? ☐ HV OK? ☐ 50k OK?	HMS prescale _____ k pretrig: _____ $e-\pi n$ evts: _____	SHMS prescale _____ k pretrig: _____ $\Sigma e-\pi n$ evts: _____	COIN pretrig: _____ k ☐ Data ok ☐ Junk
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Comments:

Run Number:	☐ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____ Mode10: cer / fadc	Start time (RC GUI): Stop time (RC GUI):	☐ Settings Verified? ☐ HV OK? ☐ 50k OK?	HMS prescale _____ k pretrig: _____ $e-\pi n$ evts: _____	SHMS prescale _____ k pretrig: _____ $\Sigma e-\pi n$ evts: _____	COIN pretrig: _____ k ☐ Data ok ☐ Junk
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Comments:

p(e,e'π)n Run Sheet

can be found at lichen.phys.uregina.ca/~huberg/fpi/

Use a separate sheet for each configuration.

Date: 22/08/20
yy mm dd

Initials: Stw

Configuration Name: _____

$Q^2 = 3.85$ $W = 2.62$ $x = 0.3915$
LOWE SHMS center

E_{beam}: 6.372 GeV

I_{beam}: 75 μA

Purpose:

- ☒ Production
☐ Test (e.g. DAQ, Detector)
☐ Optics (SHMS / HMS)
☐ Other: _____

Raster: ☒ On ☐ Off
Size: _____

HMS

SHMS

Q1	I-SET (from PSU) 150.7710 A B-HALL 0.196 T	I-SET (from PSU) 1713.36 A B-HALL -10.818 kG	HB
Q2	I-SET (from PSU) 119.7700 A B-HALL -0.20349 T	I-SET (from PSU) 1076.51 A B-HALL 7.679 kG	Q1
Q3	I-SET (from PSU) 58.1489 A B-HALL 0.11621 T	I-SET (from PSU) 1808.20 A B-HALL -17.082 kG	Q2
D	I-READ 352.50 A B-NMR 0.317028 T	I-SET (from PSU) 1189.78 A B-HALL -11.499 kG	Q3
	If momentum increased: ☐ HMS cycled? ☐ SHMS cycled?		D

HMS

p: +/- 1.158 θ(TV): 42.23
From GUI Nearest 0.005

SHMS

p: +/- 5.127 θ(TV): 8.00
From GUI Nearest 0.005

Beam position and angle on target:

3H07A	X	Y
-0.09 mm	-0.3 mm	
Nomin:	Nomin:	
3H07C	X	Y
-0.7 mm	-0.5 mm	
Nomin:	Nomin:	

Collimator:

HMS: Large ☒ Sieve ☐

SHMS: Collim ☒ Sieve ☐

Run Number:

16349

- ☐ LH2 10cm
☒ LD2 10cm
☐ Dummy 10cm
☐ C 0.5% r.l.
☐ Optics ____ cm
☐ _____

PS1: 14
PS2: 1
PS3: 1
PS4: 8
PS5: 1
PS6: 1
Mode10 cer / fadc

Start time (RC GUI):

10:44:59

Stop time (RC GUI):

11:43:39

- ☒ Settings Verified?
☒ HV OK?
☒ 50k OK?

HMS prescale 320 k
pretrig:

e-πn evts: 724

SHMS prescale 213 k
pretrig:

Σ e-πn evts: 726

COIN pretrig: 852 k

- ☒ Data ok
☐ Junk

Comments:

75 μA

Q = 214.941
ΣQ = 214.941

Run Number:

16350

- ☐ LH2 10cm
☒ LD2 10cm
☐ Dummy 10cm
☐ C 0.5% r.l.
☐ Optics ____ cm
☐ _____

PS1: 14
PS2: 1
PS3: 1
PS4: 7
PS5: 0
PS6: 1
Mode10 cer / fadc

Start time (RC GUI):

11:44:21

Stop time (RC GUI):

12:41

- ☒ Settings Verified?
☒ HV OK?
☒ 50k OK?

HMS prescale 345 k
pretrig:

e-πn evts: 776

SHMS prescale 233 k
pretrig:

Σ e-πn evts: 1500

COIN pretrig: 987 k

- ☒ Data ok
☐ Junk

Comments:

80 μA

Q = 233.601
ΣQ = 448.542

Run Number:

16351

- ☐ LH2 10cm
☒ LD2 10cm
☐ Dummy 10cm
☐ C 0.5% r.l.
☐ Optics ____ cm
☐ _____

PS1: 14
PS2: 1
PS3: 1
PS4: 7
PS5: 0
PS6: 0
Mode10 cer / fadc

Start time (RC GUI):

12:41:41

Stop time (RC GUI):

12:46:39

- ☒ Settings Verified?
☒ HV OK?
☐ 50k OK?

HMS prescale k
pretrig:

e-πn evts:

SHMS prescale k
pretrig:

Σ e-πn evts:

COIN pretrig: k

- ☐ Data ok
☐ Junk

Comments:

fadc mode 10

Run Number:

16352

- ☐ LH2 10cm
☒ LD2 10cm
☐ Dummy 10cm
☐ C 0.5% r.l.
☐ Optics ____ cm
☐ _____

PS1: 14
PS2: 1
PS3: 1
PS4: 1
PS5: 0
PS6: 0
Mode10 cer / fadc

Start time (RC GUI):

12:47:54

Stop time (RC GUI):

13:02

- ☒ Settings Verified?
☒ HV OK?
☒ 50k OK?

HMS prescale 4912 k
pretrig:

e-πn evts: 128

SHMS prescale 51 k
pretrig:

Σ e-πn evts: 1628

COIN pretrig: 220 k

- ☒ Data ok
☐ Junk

Comments:

Hms 3/4 run crash on stop Q = 51.115
ΣQ = 499.657

p(e,e' π)n Run Sheet

can be found at lichen.phys.uregina.ca/~huberg/fpi/

Date: 22/08/20
yy mm dd

Initials: SAC

Continuation of Configuration:

$Q^2=3.85$ $W=2.62$ $x=0.3915$
10 WE SHMS Center

16353 is junk

This sheet is only to be used to continue a running configuration.

Run Number: 16354	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: <u>14</u> PS2: <u>-1</u> PS3: <u>11</u> PS4: <u>-1</u> PS5: <u>-1</u> PS6: <u>0</u> Mode10: cer / fadc	Start time (RC GUI): 13:04:37 Stop time (RC GUI): 13:15	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale: 4845 k pretrig: $e-\pi n$ evts: 139	SHMS prescale: 50 k pretrig: $\Sigma e-\pi n$ evts: 1767	COIN pretrig: 217 k ☒ Data ok ☐ Junk
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HMS 3/4 crash @ run end $Q=50.392$
 $\Sigma Q=550.049$

Run Number: 16355	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: <u>14</u> PS2: <u>-1</u> PS3: <u>11</u> PS4: <u>-1</u> PS5: <u>-1</u> PS6: <u>0</u> Mode10: cer / fadc	Start time (RC GUI): 13:17:05 Stop time (RC GUI): 13:32:34	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale: 5402 k pretrig: $e-\pi n$ evts: 149	SHMS prescale: 56 k pretrig: $\Sigma e-\pi n$ evts: 1916	COIN pretrig: 233 k ☒ Data ok ☐ Junk
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HMS 3/4 $Q=55.994$
 $\Sigma Q=606043$

Run Number: 16356	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: <u>14</u> PS2: <u>-1</u> PS3: <u>11</u> PS4: <u>-1</u> PS5: <u>-1</u> PS6: <u>0</u> Mode10: cer / fadc	Start time (RC GUI): 13:33:09 Stop time (RC GUI): 13:45:29	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale: 4983 k pretrig: $e-\pi n$ evts: 157	SHMS prescale: 52 k pretrig: $\Sigma e-\pi n$ evts: 2073	COIN pretrig: 218 k ☒ Data ok ☐ Junk
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HMS 3/4 $Q=51.661$
 $\Sigma Q=857.704$

Run Number: 16357	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: <u>14</u> PS2: <u>-1</u> PS3: <u>11</u> PS4: <u>-1</u> PS5: <u>-1</u> PS6: <u>0</u> Mode10: cer / fadc	Start time (RC GUI): 13:46:42 Stop time (RC GUI): 14:46:01	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale: 310 k pretrig: $e-\pi n$ evts: 681	SHMS prescale: 208 k pretrig: $\Sigma e-\pi n$ evts: 2754	COIN pretrig: 880 k ☒ Data ok ☐ Junk
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Normal run $Q=207.913$
 $\Sigma Q=865.617$

Run Number: 16358	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: <u>14</u> PS2: <u>-1</u> PS3: <u>11</u> PS4: <u>-1</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): 14:46:30 Stop time (RC GUI): 15:46:44	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale: 380 k pretrig: $e-\pi n$ evts: 833	SHMS prescale: 257 k pretrig: $\Sigma e-\pi n$ evts: 3587	COIN pretrig: 1094 k ☒ Data ok ☐ Junk
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$Q=257.284$ mC
 $\Sigma Q=1122.901$ mC

Run Number: 16359	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: <u>14</u> PS2: <u>-1</u> PS3: <u>11</u> PS4: <u>-1</u> PS5: <u>-1</u> PS6: <u>0</u> Mode10: cer / fadc	Start time (RC GUI): 15:47:12 Stop time (RC GUI): 16:46	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale: 341 k pretrig: $e-\pi n$ evts: 752	SHMS prescale: 229 k pretrig: $\Sigma e-\pi n$ evts: 4339	COIN pretrig: 963 k ☒ Data ok ☐ Junk
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$Q=229.588$ mC
 $\Sigma Q=1352.489$ mC

80 μ A

$p(e, e'\pi)n$ Run Sheet

can be found at lichen.phys.uregina.ca/~huberg/fpi/

Date: 22/08/20
yy mm dd

Initials: Iu. S.

Continuation of Configuration:

$Q^2=3.85$, $W=2.62$, $X=0.3915$

This sheet is only to be used to continue a running configuration.

low ϵ , SHMS center.

Run Number: 16360	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: <u>14</u> PS2: <u>-1</u> PS3: <u>-1</u> PS4: <u>87</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: <u>cer</u> fadc	Start time (RC GUI): <u>16:47</u> Stop time (RC GUI): <u>17:46</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: <u>359</u> k $e-\pi n$ evts: <u>832</u>	SHMS prescale pretrig: <u>241</u> k $\Sigma e-\pi n$ evts: <u>5171</u>	COIN pretrig: <u>1023</u> k ☒ Data ok ☐ Junk
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Comments:

80 μ A

$Q=241.430$ mC
 $\Sigma Q=1593.819$ mC

Run Number: 16361	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: <u>14</u> PS2: <u>-1</u> PS3: <u>-1</u> PS4: <u>8</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: <u>cer</u> fadc	Start time (RC GUI): <u>17:47</u> Stop time (RC GUI): <u>18:46</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: <u>177</u> k $e-\pi n$ evts: <u>822</u>	SHMS prescale pretrig: <u>236</u> k $\Sigma e-\pi n$ evts: <u>5993</u>	COIN pretrig: <u>994</u> k ☒ Data ok ☐ Junk
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Comments:

80 μ A

$Q=236.514$ mC
 $\Sigma Q=1830.433$ mC

Run Number: 16362	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: <u>14</u> PS2: <u>-1</u> PS3: <u>-1</u> PS4: <u>8</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: <u>cer</u> fadc	Start time (RC GUI): <u>18:47</u> Stop time (RC GUI): <u>19:46</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: <u>161</u> k $e-\pi n$ evts: <u>722</u>	SHMS prescale pretrig: <u>215</u> k $\Sigma e-\pi n$ evts: <u>6715</u>	COIN pretrig: <u>907</u> k ☒ Data ok ☐ Junk
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Comments:

80 μ A

$Q=215.129$ mC
 $\Sigma Q=2045.562$ mC

Run Number: 16363	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: <u>14</u> PS2: <u>-1</u> PS3: <u>-1</u> PS4: <u>8</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: <u>cer</u> fadc	Start time (RC GUI): <u>19:47</u> Stop time (RC GUI): <u>20:47</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: <u>182</u> k $e-\pi n$ evts: <u>838</u>	SHMS prescale pretrig: <u>245</u> k $\Sigma e-\pi n$ evts: <u>7553</u>	COIN pretrig: <u>1034</u> k ☒ Data ok ☐ Junk
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Comments:

80 μ A

$Q=244.908$ mC
 $\Sigma Q=2290.470$ mC

Run Number: 16364	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: <u>14</u> PS2: <u>-1</u> PS3: <u>-1</u> PS4: <u>8</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: <u>cer</u> fadc	Start time (RC GUI): <u>20:49</u> Stop time (RC GUI): <u>20:53</u>	☒ Settings Verified? ☒ HV OK? ☐ 50k OK?	HMS prescale pretrig: <u>182</u> k $e-\pi n$ evts: <u>838</u>	SHMS prescale pretrig: <u>245</u> k $\Sigma e-\pi n$ evts: <u>7553</u>	COIN pretrig: <u>1034</u> k ☐ Data ok ☒ Junk
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Comments:

80 μ A

stopped due to the collimator warming

~~Q=244.908~~ mC
 ~~$\Sigma Q=2290.470$~~ mC
Junk

Run Number: 16365	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: <u>14</u> PS2: <u>-1</u> PS3: <u>-1</u> PS4: <u>8</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: <u>cer</u> fadc	Start time (RC GUI): <u>20:56</u> Stop time (RC GUI): <u>21:04</u>	☒ Settings Verified? ☒ HV OK? ☐ 50k OK?	HMS prescale pretrig: <u>182</u> k $e-\pi n$ evts: <u>838</u>	SHMS prescale pretrig: <u>245</u> k $\Sigma e-\pi n$ evts: <u>7553</u>	COIN pretrig: <u>1034</u> k ☐ Data ok ☒ Junk
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Comments:

80 μ A

no beam — Junk — Junk —

$p(e, e'\pi)n$ Run Sheet

can be found at lichen.phys.uregina.ca/~huberg/fpi/

Date: 22/08/20
yy mm dd

Initials: Iu.S.

Continuation of Configuration:

$Q^2=3.85$, $W=2.62$, $x=0.3915$

low E_e , SKMS center

This sheet is only to be used to continue a running configuration.

Run Number:

16366

- ☐ LH2 10cm
☒ LD2 10cm
☐ Dummy 10cm
☐ C 0.5% r.l.
☐ Optics ____ cm
☐ _____

PS1: 14
PS2: -1
PS3: -1
PS4: 8
PS5: 0
PS6: -1
Mode10: cer fadc

Start time (RC GUI):

21:05

Stop time (RC GUI):

22:04

- ☒ Settings Verified?
☒ HV OK?
☒ 50k OK?

HMS prescale
pretrig: 186 k

$e-\pi n$ evts:

822

SHMS prescale
pretrig: 248 k

$\Sigma e-\pi n$ evts:

8375

COIN pretrig: 1055 k

- ☒ Data ok
☐ Junk

Comments:

80 μ A

$Q = 248.185 \text{ mC}$

$\Sigma Q = 2538.665 \text{ mC}$

Run Number:

16367

- ☐ LH2 10cm
☒ LD2 10cm
☐ Dummy 10cm
☐ C 0.5% r.l.
☐ Optics ____ cm
☐ _____

PS1: 14
PS2: -1
PS3: -1
PS4: 8
PS5: 0
PS6: -1
Mode10: cer fadc

Start time (RC GUI):

22:04

Stop time (RC GUI):

22:48

- ☒ Settings Verified?
☒ HV OK?
☒ 50k OK?

HMS prescale
pretrig: 128 k

$e-\pi n$ evts:

602

SHMS prescale
pretrig: 171 k

$\Sigma e-\pi n$ evts:

8977

COIN pretrig: 721 k

- ☒ Data ok
☐ Junk

Comments:

80 μ A

$Q = 171.332 \text{ mC}$

$\Sigma Q = 2709.997 \text{ mC}$

Run Number:

16368

- ☐ LH2 10cm
☒ LD2 10cm
☐ Dummy 10cm
☐ C 0.5% r.l.
☐ Optics ____ cm
☐ _____

PS1: 14
PS2: -1
PS3: -1
PS4: 8
PS5: 0
PS6: -1
Mode10: cer fadc

Start time (RC GUI):

22:49

Stop time (RC GUI):

23:26

- ☒ Settings Verified?
☒ HV OK?
☒ 50k OK?

HMS prescale
pretrig: 122 k

$e-\pi n$ evts:

549

SHMS prescale
pretrig: 162 k

$\Sigma e-\pi n$ evts:

9526

COIN pretrig: 692 k

- ☒ Data ok
☐ Junk

Comments:

80 μ A

$Q = 162.148 \text{ mC}$

$\Sigma Q = 2872.145 \text{ mC}$

Run Number:

16369

- ☐ LH2 10cm
☒ LD2 10cm
☐ Dummy 10cm
☐ C 0.5% r.l.
☐ Optics ____ cm
☐ _____

PS1: 14
PS2: -1
PS3: -1
PS4: 8
PS5: 0
PS6: -1
Mode10: cer fadc

Start time (RC GUI):

23:27

Stop time (RC GUI):

00:11:00

- ☒ Settings Verified?
☒ HV OK?
☒ 50k OK?

HMS prescale
pretrig: 134 k

$e-\pi n$ evts:

592

SHMS prescale
pretrig: 184 k

$\Sigma e-\pi n$ evts:

10118

COIN pretrig: 793 k

- ☒ Data ok
☐ Junk

Comments:

80 μ A

$Q = 184.101 \text{ mC}$

$\Sigma Q = 3056.246 \text{ mC}$

Run Number:

16370

- ☐ LH2 10cm
☐ LD2 10cm
☒ Dummy 10cm
☐ C 0.5% r.l.
☐ Optics ____ cm
☐ _____

PS1: 4
PS2: -1
PS3: -1
PS4: 3
PS5: 0
PS6: -1
Mode10: cer fadc

Start time (RC GUI):

00:20:09

Stop time (RC GUI):

01:21:19

- ☒ Settings Verified?
☒ HV OK?
☒ 50k OK?

HMS prescale
pretrig: 289 k

$e-\pi n$ evts:

18

SHMS prescale
pretrig: 375 k

$\Sigma e-\pi n$ evts:

18

COIN pretrig: 40 k

- ☒ Data ok
☐ Junk

Comments:

40 μ A

$Q = 114.453 \text{ mC}$

$\Sigma Q = 114.453 \text{ mC}$

Run Number:

16371

- ☐ LH2 10cm
☐ LD2 10cm
☒ Dummy 10cm
☐ C 0.5% r.l.
☐ Optics ____ cm
☐ _____

PS1: 4
PS2: -1
PS3: -1
PS4: 3
PS5: 0
PS6: -1
Mode10: cer fadc

Start time (RC GUI):

01:22:02

Stop time (RC GUI):

02:23:16

- ☒ Settings Verified?
☒ HV OK?
☒ 50k OK?

HMS prescale
pretrig: 262 k

$e-\pi n$ evts:

16

SHMS prescale
pretrig: 342 k

$\Sigma e-\pi n$ evts:

34

COIN pretrig: 40 k

- ☒ Data ok
☐ Junk

Comments:

40 μ A

$Q = 104.320 \text{ mC}$

$\Sigma Q = 218.773 \text{ mC}$

$p(e, e'\pi)n$ Run Sheet

can be found at lichen.phys.uregina.ca/~huberg/fpil

Date: 22/08/21
yy mm dd

Initials: N.S.

Continuation of Configuration:

$Q^2=3.85$, $W=2.62$, $X=0.3915$

low Σ , SHMS center

This sheet is only to be used to continue a running configuration.

Run Number: 16372	☐ LH2 10cm ☐ LD2 10cm ☒ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: <u>9</u> PS2: <u>-1</u> PS3: <u>-1</u> PS4: <u>3</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: <u>cep</u> / fadc	Start time (RC GUI): <u>02:24:19</u> Stop time (RC GUI): <u>02:36:06</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale <u>60</u> k pretrig: $e-\pi n$ evts: <u>5</u>	SHMS prescale <u>79</u> k pretrig: $\Sigma e-\pi n$ evts: <u>39</u>	COIN pretrig: <u>8</u> k ☒ Data ok ☐ Junk
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40 MA

$Q = 24.106$ mC
 $\Sigma Q = 242.879$

Run Number: 16373	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: <u>13</u> PS2: <u>-1</u> PS3: <u>-1</u> PS4: <u>6</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: <u>cep</u> / fadc	Start time (RC GUI): <u>02:47:41</u> Stop time (RC GUI): <u>03:47:20</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale <u>196</u> k pretrig: $e-\pi n$ evts: <u>509</u>	SHMS prescale <u>234</u> k pretrig: $\Sigma e-\pi n$ evts: <u>509</u>	COIN pretrig: <u>191</u> k ☒ Data ok ☐ Junk
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80 MA

$Q = 207.949$ mC
 $\Sigma Q = 207.949$

Run Number: 16374	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: <u>13</u> PS2: <u>-1</u> PS3: <u>-1</u> PS4: <u>6</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: <u>cep</u> / fadc	Start time (RC GUI): <u>03:47:55</u> Stop time (RC GUI): <u>04:37:47</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale <u>2d</u> k pretrig: $e-\pi n$ evts: <u>534</u>	SHMS prescale <u>242</u> k pretrig: $\Sigma e-\pi n$ evts: <u>1043</u>	COIN pretrig: <u>191</u> k ☒ Data ok ☐ Junk
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80 MA

$Q = 213.817$ mC
 $\Sigma Q = 421.766$

Run Number: 16375	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: <u>13</u> PS2: <u>-1</u> PS3: <u>-1</u> PS4: <u>5</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: <u>cep</u> / fadc	Start time (RC GUI): <u>04:39:59</u> Stop time (RC GUI): <u>05:40:06</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale <u>423</u> k pretrig: $e-\pi n$ evts: <u>601</u>	SHMS prescale <u>263</u> k pretrig: $\Sigma e-\pi n$ evts: <u>1644</u>	COIN pretrig: <u>213</u> k ☒ Data ok ☐ Junk
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80 MA

$Q = 232.221$ mC
 $\Sigma Q = 653.987$

Run Number: 16376	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: <u>13</u> PS2: <u>-1</u> PS3: <u>-1</u> PS4: <u>5</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: <u>cep</u> / fadc	Start time (RC GUI): <u>05:40:49</u> Stop time (RC GUI): <u>06:45:04</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale <u>492</u> k pretrig: $e-\pi n$ evts: <u>654</u>	SHMS prescale <u>279</u> k pretrig: $\Sigma e-\pi n$ evts: <u>2298</u>	COIN pretrig: <u>222</u> k ☒ Data ok ☐ Junk
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80 MA

$Q = 247.840$ mC
 $\Sigma Q = 901.827$ mC

Run Number: 16377	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: <u>13</u> PS2: <u>-1</u> PS3: <u>-1</u> PS4: <u>5</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: <u>cep</u> / fadc	Start time (RC GUI): <u>06:45:39</u> Stop time (RC GUI): <u>07:45:17</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale <u>436</u> k pretrig: $e-\pi n$ evts: <u>653</u>	SHMS prescale <u>271</u> k pretrig: $\Sigma e-\pi n$ evts: <u>2951</u>	COIN pretrig: <u>215</u> k ☒ Data ok ☐ Junk
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80 MA

$Q = 239.794$ mC
 $\Sigma Q = 1141.621$

$p(e, e'\pi)n$ Run Sheet

can be found at lichen.phys.uregina.ca/~huberg/fpi/

Date: 22/08/21
yy mm dd

Initials: N.S.

Continuation of Configuration:

$Q^2=3.85$, $W=2.62$, $X=0.3915$

low z , SHMS center

This sheet is only to be used to continue a running configuration.

Run Number: 16378	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: <u>13</u> PS2: <u>-1</u> PS3: <u>1</u> PS4: <u>5</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): 07:45:55 Stop time (RC GUI): 08:35:31	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 395 k $e-\pi n$ evts: 591	SHMS prescale pretrig: 246 k $\Sigma e-\pi n$ evts: 3542	COIN pretrig: 195 k ☒ Data ok ☐ Junk
Comments: 80 MA							
$Q=217.478$ $\Sigma Q=$							

Run Number: 16379	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: <u>13</u> PS2: <u>-1</u> PS3: <u>1</u> PS4: <u>5</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): 8:36:12 Stop time (RC GUI): 9:40:28	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 492 k $e-\pi n$ evts: 693	SHMS prescale pretrig: 308 k $\Sigma e-\pi n$ evts: 4235	COIN pretrig: 245 k ☒ Data ok ☐ Junk
Comments:							
$Q=272.044$ $\Sigma Q=1631.143$							

Run Number: 16380	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: <u>13</u> PS2: <u>-1</u> PS3: <u>1</u> PS4: <u>5</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): 9:40:58 Stop time (RC GUI): 10:40:04	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 411 k $e-\pi n$ evts: 614	SHMS prescale pretrig: 257 k $\Sigma e-\pi n$ evts: 4849	COIN pretrig: 206 k ☐ Data ok ☐ Junk
Comments:							
$Q=227.852$ $\Sigma Q=1858.995$							

Run Number: 16381	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: <u>13</u> PS2: <u>-1</u> PS3: <u>1</u> PS4: <u>5</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): 10:40:39 Stop time (RC GUI): 11:39:37	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 375 k $e-\pi n$ evts: 516	SHMS prescale pretrig: 233 k $\Sigma e-\pi n$ evts: 5365	COIN pretrig: 191 k ☐ Data ok ☐ Junk
Comments:							
$Q=206.333$ $\Sigma Q=2065.328$							

Run Number: 16382	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: <u>13</u> PS2: <u>-1</u> PS3: <u>1</u> PS4: <u>5</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): 11:40:08 Stop time (RC GUI): 11:43:17	☒ Settings Verified? ☒ HV OK? ☐ 50k OK?	HMS prescale pretrig: k $e-\pi n$ evts:	SHMS prescale pretrig: k $\Sigma e-\pi n$ evts:	COIN pretrig: k ☒ Data ok ☐ Junk
Comments: fadc mode 10							

Run Number: 16383	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: <u>13</u> PS2: <u>-1</u> PS3: <u>1</u> PS4: <u>5</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): 11:44:52 Stop time (RC GUI): 11:4	☒ Settings Verified? ☒ HV OK? ☐ 50k OK?	HMS prescale pretrig: k $e-\pi n$ evts:	SHMS prescale pretrig: k $\Sigma e-\pi n$ evts:	COIN pretrig: k ☐ Data ok ☒ Junk
Comments: Hms 3/4 left fadc mode 10 on accident 1/4							

$p(e, e'\pi)n$ Run Sheet

can be found at lichen.phys.uregina.ca/~huberg/fpi/

Date: 22/08/21
yy mm dd

Initials: SAL

Continuation of Configuration:

$Q^2 = 3.85$, $W = 2.62$, $x = 0.3915$
low e , SHMS center

This sheet is only to be used to continue a running configuration.

Run Number: <u>16384</u>	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: <u>13</u> PS2: <u>-1</u> PS3: <u>9</u> PS4: <u>-1</u> PS5: <u>-1</u> PS6: <u>0</u> Mode10: cer / fadc	Start time (RC GUI): 11:48:15 Stop time (RC GUI): 11:48:15	☐ Settings Verified? ☐ HV OK? ☐ 50k OK?	HMS prescale pretrig: <u> </u> k $e-\pi n$ evts: <u> </u>	SHMS prescale pretrig: <u> </u> k $\Sigma e-\pi n$ evts: <u> </u>	COIN pretrig: <u> </u> k ☐ Data ok ☒ Junk
Comments: <u>— Junk — Junk — Junk</u>							

Run Number: <u>16385</u>	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: <u>13</u> PS2: <u>-1</u> PS3: <u>9</u> PS4: <u>-1</u> PS5: <u>-1</u> PS6: <u>0</u> Mode10: cer / fadc	Start time (RC GUI): <u>11:48:15</u> Stop time (RC GUI): <u>12:35:46</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: <u>6288</u> k $e-\pi n$ evts: <u>555</u>	SHMS prescale pretrig: <u>231</u> k $\Sigma e-\pi n$ evts: <u>5920</u>	COIN pretrig: <u>183</u> k ☒ Data ok ☐ Junk
Comments: <u>Hms 3/4 stopped @ ~2m events</u> $Q = 204.34$ $\Sigma Q = 2267.668$							

Run Number: <u>16386</u>	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: <u>13</u> PS2: <u>-1</u> PS3: <u>0</u> PS4: <u>-1</u> PS5: <u>-1</u> PS6: <u>0</u> Mode10: cer / fadc	Start time (RC GUI): <u>12:39:20</u> Stop time (RC GUI): <u>12:49:14</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: <u>1314</u> k $e-\pi n$ evts: <u>126</u>	SHMS prescale pretrig: <u>49</u> k $\Sigma e-\pi n$ evts: <u>6046</u>	COIN pretrig: <u>38</u> k ☒ Data ok ☐ Junk
Comments: <u>Hms 3/4</u> $Q = 42.935$ $\Sigma Q = 2312.603$							

Run Number: <u>16387</u>	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: <u>13</u> PS2: <u>-1</u> PS3: <u>-1</u> PS4: <u>5</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): <u>12:50:17</u> Stop time (RC GUI): <u>13:53:54</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: <u>464</u> k $e-\pi n$ evts: <u>670</u>	SHMS prescale pretrig: <u>290</u> k $\Sigma e-\pi n$ evts: <u>6716</u>	COIN pretrig: <u>231</u> k ☒ Data ok ☐ Junk
Comments: <u>973 keV on 1/4</u> $Q = 256.087$ $\Sigma Q = 2568.690$							

Run Number: <u>16388</u>	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: <u>13</u> PS2: <u>-1</u> PS3: <u>-1</u> PS4: <u>5</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): <u>13:54:31</u> Stop time (RC GUI): <u>14:52:42</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: <u>445</u> k $e-\pi n$ evts: <u>634</u>	SHMS prescale pretrig: <u>278</u> k $\Sigma e-\pi n$ evts: <u>7350</u>	COIN pretrig: <u>219</u> k ☒ Data ok ☐ Junk
Comments: <u> </u> $Q = 245.407$ $\Sigma Q = 2814.097$ nC							

Run Number: <u>16389</u>	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: <u>13</u> PS2: <u>-1</u> PS3: <u>-1</u> PS4: <u>5</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): <u>14:53:24</u> Stop time (RC GUI): <u>15:53:12</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: <u>445</u> k $e-\pi n$ evts: <u>659</u>	SHMS prescale pretrig: <u>279</u> k $\Sigma e-\pi n$ evts: <u>8009</u>	COIN pretrig: <u>220</u> k ☒ Data ok ☐ Junk
Comments: <u>80 nA</u> $Q = 246.547$ mC $\Sigma Q = 3060.644$ mC							

p(e,e'π)n Run Sheet

can be found at lichen.phys.uregina.ca/~huberg/fpi/

Date: 22/08/21
yy mm dd

Initials: Iu.S.

Continuation of Configuration:

$Q^2=3.85$, $w=2.62$, $x=0.3915$
low e SHMS center

This sheet is only to be used to continue a running configuration.

Run Number: 16390	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: 13 PS2: -1 PS3: 5 PS4: 9 PS5: 9 PS6: 0 Mode10: cer / fadc	Start time (RC GUI): 15:53:44 Stop time (RC GUI): 16:55	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 489 k e-πn evts: 745	SHMS prescale pretrig: 307 k Σ e-πn evts: 8754	COIN pretrig: 241 k ☒ Data ok ☐ Junk
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Comments:

80 μA

$Q=270.881\text{mc}$
 $\Sigma Q=3331.525\text{mc}$

Run Number: 16391	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: / PS2: / PS3: / PS4: / PS5: / PS6: / Mode10: cer / fadc	Start time (RC GUI): / Stop time (RC GUI): /	☐ Settings Verified? ☐ HV OK? ☐ 50k OK?	HMS prescale pretrig: / k e-πn evts: /	SHMS prescale pretrig: / k Σ e-πn evts: /	COIN pretrig: / k ☐ Data ok ☒ Junk
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Comments:

- Junk

- Junk

- Junk

Run Number: 16392	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: 13 PS2: -1 PS3: -1 PS4: 6 PS5: 0 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 16:56 Stop time (RC GUI): 17:52	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 231 k e-πn evts: 688	SHMS prescale pretrig: 282 k Σ e-πn evts: 9442	COIN pretrig: 222 k ☒ Data ok ☐ Junk
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Comments:

80 μA

$Q=248.819\text{mc}$
 $\Sigma Q=3580.344\text{mc}$

Run Number: 16393	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: 13 PS2: -1 PS3: -1 PS4: 6 PS5: 0 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 17:53 Stop time (RC GUI): 18:57	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 225 k e-πn evts: 673	SHMS prescale pretrig: 274 k Σ e-πn evts: 10115	COIN pretrig: 217 k ☒ Data ok ☐ Junk
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Comments:

80 μA

$Q=242.403\text{mc}$
 $\Sigma Q=3822.747\text{mc}$

Run Number:	☐ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____ Mode10: cer / fadc	Start time (RC GUI): _____ Stop time (RC GUI): _____	☐ Settings Verified? ☐ HV OK? ☐ 50k OK?	HMS prescale pretrig: ____ k e-πn evts: ____	SHMS prescale pretrig: ____ k Σ e-πn evts: ____	COIN pretrig: ____ k ☐ Data ok ☐ Junk
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Comments:

Run Number:	☐ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____ Mode10: cer / fadc	Start time (RC GUI): _____ Stop time (RC GUI): _____	☐ Settings Verified? ☐ HV OK? ☐ 50k OK?	HMS prescale pretrig: ____ k e-πn evts: ____	SHMS prescale pretrig: ____ k Σ e-πn evts: ____	COIN pretrig: ____ k ☐ Data ok ☐ Junk
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Comments:

$p(e, e'\pi)n$ Run Sheet

can be found at lichen.phys.uregina.ca/~huberg/fpi/

Use a separate sheet for each configuration.

Date: 22/08/21
yy mm dd

Initials: L.S.

Configuration Name:

$Q^2=3.85$, $W=2.62$, $x=0.3915$
low E, SHMS left, Part 2

E_{beam} : 6.372 GeV

I_{beam} : 80 μA

Purpose:

- ☒ Production
☐ Test (e.g. DAQ, Detector)
☐ Optics (SHMS / HMS)
☐ Other: _____

Raster: ☒ On ☐ Off
Size: 2x2 mm

Beam position and angle on target:

3H07A	X	Y
-0.095 mm	-0.29 mm	
Nomin: -0.09	Nomin: -0.3	
3H07C	X	Y
-0.69 mm	-0.52 mm	
Nomin: -0.68	Nomin: -0.49	

HMS

SHMS

Q1	I-SET (from PSU) 156.7710 B-HALL 0.19486 T	A 1713.3600 B-HALL -10.820 kG	HB
Q2	I-SET (from PSU) 119.7700 B-HALL -0.19999 T	A 1076.5100 B-HALL 7.679 kG	Q1
Q3	I-SET (from PSU) 58.1489 B-HALL 0.11520 T	A 1808.2000 B-HALL -17.082 kG	Q2
D	I-SET (from PSU) 355.3000 B-NMR 0.3170360 T	A 1189.7800 B-HALL -11.500 kG	Q3
	If momentum increased: ☐ HMS cycled? ☐ SHMS cycled?	I-SET (from PSU) 1635.8200 B-NMR 11.837 kG	D

Previous Run #16332

Run Number:

16394

- ☒ LH2 10cm
☐ LD2 10cm
☐ Dummy 10cm
☐ C 0.5% r.l.
☐ Optics ____ cm
☐ _____

PS1: 12
PS2: -1
PS3: -1
PS4: 6
PS5: 0
PS6: -1
Mode10: cer / fadc

Start time (RC GUI):

19:03

Stop time (RC GUI):

20:11

- ☒ Settings Verified?
☒ HV OK?
☒ 50k OK?

HMS prescale 227 k
pretrig:

$e-\pi n$ evts: 575

SHMS prescale 239 k
pretrig:

$\Sigma e-\pi n$ evts: 6643

COIN pretrig: 121 k

- ☒ Data ok
☐ Junk

Comments:

80 μA

$Q = 244.544 \text{ mC}$
 $\Sigma Q = 2935.646 \text{ mC}$

Run Number:

16395

- ☒ LH2 10cm
☐ LD2 10cm
☐ Dummy 10cm
☐ C 0.5% r.l.
☐ Optics ____ cm
☐ _____

PS1: 12
PS2: -1
PS3: -1
PS4: 6
PS5: 0
PS6: -1
Mode10: cer / fadc

Start time (RC GUI):

20:12

Stop time (RC GUI):

21:08

- ☒ Settings Verified?
☒ HV OK?
☒ 50k OK?

HMS prescale 222 k
pretrig:

$e-\pi n$ evts: 533

SHMS prescale 233 k
pretrig:

$\Sigma e-\pi n$ evts: 7176

COIN pretrig: 113 k

- ☒ Data ok
☐ Junk

Comments:

80 μA

$Q = 238.376 \text{ mC}$
 $\Sigma Q = 3174.022 \text{ mC}$

Run Number:

16396

- ☒ LH2 10cm
☐ LD2 10cm
☐ Dummy 10cm
☐ C 0.5% r.l.
☐ Optics ____ cm
☐ _____

PS1: 12
PS2: -1
PS3: -1
PS4: 6
PS5: 0
PS6: -1
Mode10: cer / fadc

Start time (RC GUI):

21:09

Stop time (RC GUI):

21:28

- ☒ Settings Verified?
☒ HV OK?
☒ 50k OK?

HMS prescale 66 k
pretrig:

$e-\pi n$ evts: 172

SHMS prescale 69 k
pretrig:

$\Sigma e-\pi n$ evts: 7348

COIN pretrig: 35 k

- ☒ Data ok
☐ Junk

Comments:

80 μA

stopped as the beam was gone

$Q = 71.247 \text{ mC}$
 $\Sigma Q = 3245.269 \text{ mC}$

Run Number:

16397

- ☒ LH2 10cm
☐ LD2 10cm
☐ Dummy 10cm
☐ C 0.5% r.l.
☐ Optics ____ cm
☐ _____

PS1: 12
PS2: -1
PS3: -1
PS4: 6
PS5: 0
PS6: -1
Mode10: cer / fadc

Start time (RC GUI):

22:18

Stop time (RC GUI):

22:50

- ☒ Settings Verified?
☒ HV OK?
☒ 50k OK?

HMS prescale 120 k
pretrig:

$e-\pi n$ evts: 283

SHMS prescale 127 k
pretrig:

$\Sigma e-\pi n$ evts: 7631

COIN pretrig: 63 k

- ☒ Data ok
☐ Junk

Comments:

80 μA

$Q = 129.913 \text{ mC}$
 $\Sigma Q = 3375.182 \text{ mC}$

p(e,e' π)n Run Sheet

can be found at lichen.phys.uregina.ca/~huberg/fpi/

Date: 22/08/21
yy mm dd

Initials: Iu.S.

Continuation of Configuration:

$Q^2 = 3.85$, $W = 2.62$, $x = 0.3915$

low E, SKMS left, Part 2

This sheet is only to be used to continue a running configuration.

Run Number: 16398	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: <u>12</u> PS2: <u>-1</u> PS3: <u>-1</u> PS4: <u>6</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: <u>cer</u> / fadc	Start time (RC GUI): <u>22:52</u> Stop time (RC GUI): <u>23:41</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale <u>172</u> k pretrig: <u>423</u> $e-\pi n$ evts:	SHMS prescale <u>181</u> k pretrig: <u>8054</u> $\Sigma e-\pi n$ evts:	COIN pretrig: <u>91</u> k ☒ Data ok ☐ Junk
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Comments: **80 μ A** $Q = 185.552$ mC
 $\Sigma Q = 3560.734$ mC

Run Number: 16399	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: <u>13</u> PS2: <u>-1</u> PS3: <u>-1</u> PS4: <u>8</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: <u>cer</u> / fadc	Start time (RC GUI): <u>23:51</u> Stop time (RC GUI): <u>00:51:35</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale <u>179</u> k pretrig: <u>669</u> $e-\pi n$ evts:	SHMS prescale <u>217</u> k pretrig: <u>6900</u> $\Sigma e-\pi n$ evts:	COIN pretrig: <u>471</u> k ☒ Data ok ☐ Junk
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Comments: **80 μ A** $Q = 244.518$ mC
 $\Sigma Q = 2408.714$
Continued from previous run #16348

Run Number: 16400	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: <u>13</u> PS2: <u>-1</u> PS3: <u>-1</u> PS4: <u>8</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: <u>cer</u> / fadc	Start time (RC GUI): <u>00:52:14</u> Stop time (RC GUI): <u>01:53:20</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale <u>185</u> k pretrig: <u>729</u> $e-\pi n$ evts:	SHMS prescale <u>224</u> k pretrig: <u>7629</u> $\Sigma e-\pi n$ evts:	COIN pretrig: <u>489</u> k ☒ Data ok ☐ Junk
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Comments: **80 μ A** $Q = 252.405$ mC
 $\Sigma Q = 2661.119$

Run Number: 16401	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: <u>13</u> PS2: <u>-1</u> PS3: <u>-1</u> PS4: <u>8</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: <u>cer</u> / fadc	Start time (RC GUI): <u>01:53:54</u> Stop time (RC GUI): <u>02:41:18</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale <u>147</u> k pretrig: <u>583</u> $e-\pi n$ evts:	SHMS prescale <u>177</u> k pretrig: <u>8212</u> $\Sigma e-\pi n$ evts:	COIN pretrig: <u>388</u> k ☒ Data ok ☐ Junk
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Comments: **80 μ A** $Q =$ ~~521~~199.508 mC
 $\Sigma Q = 2860.627$

Run Number:	☐ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____ Mode10: <u>cer</u> / fadc	Start time (RC GUI): Stop time (RC GUI):	☐ Settings Verified? ☐ HV OK? ☐ 50k OK?	HMS prescale _____ k pretrig: _____ $e-\pi n$ evts:	SHMS prescale _____ k pretrig: _____ $\Sigma e-\pi n$ evts:	COIN pretrig: _____ k ☐ Data ok ☐ Junk
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Comments:

Run Number:	☐ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____ Mode10: <u>cer</u> / fadc	Start time (RC GUI): Stop time (RC GUI):	☐ Settings Verified? ☐ HV OK? ☐ 50k OK?	HMS prescale _____ k pretrig: _____ $e-\pi n$ evts:	SHMS prescale _____ k pretrig: _____ $\Sigma e-\pi n$ evts:	COIN pretrig: _____ k ☐ Data ok ☐ Junk
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Comments: