

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

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

Date: 22, 06, 22
yy mm dd

Initials: N.S/G

Use a separate sheet for each configuration.

Configuration Name:

$\alpha^2 = 1.60$, $W = 3.06$, $X = 0.1568$

low E , SHMS ~~center~~

$E_{\text{beam}} = 6.399$ GeV

$I_{\text{beam}} = 40$ μA

Purpose:

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

Raster: ☒ On ☐ Off
Size: 2 mm X 2 mm

Beam position and angle on target:

3H07A	X	Y	
-0.10	mm	-0.30	mm
Nomin:	-0.09	Nomin:	-0.3
3H07C	X	Y	
-0.7	mm	-0.48	mm
Nomin:	-0.68	Nomin:	-0.49

HMS

SHMS

Q1	I-SET (from PSU) 124.9690 B-HALL 0.16453 T	A	I-SET (from PSU) 1815.2400 B-HALL -11.465 kg	A	HB
Q2	I-SET (from PSU) 99.2448 B-HALL ?	A	I-SET (from PSU) 1138.4600 B-HALL 8.126 kg	A	Q1
Q3	I-SET (from PSU) 48.1614 B-HALL 0.09155	A	I-SET (from PSU) 1912.2400 B-HALL -18.062 kg	A	Q2
D	I-READ 292.5000 B-NMR 6.2628060	A	I-SET (from PSU) 1258.2400 B-HALL -12.159 kg	A	Q3
	If momentum increased: ☐ HMS cycled? ☒ SHMS cycled?		I-SET (from PSU) 1729.9500 B-NMR 12.492 kg		

HMS

$p = +0.9600$
From GUI

$\theta(\text{TV}) = 29.550$
Nearest 0.005

SHMS

$p = +5.4220$
From GUI

$\theta(\text{TV}) = 11.111$
Nearest 0.005

Collimator:

HMS: Large ☒
Sieve ☐

SHMS: Collim ☒
Sieve ☐

Run Number:

16403

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

PS1: 13
PS2: -1
PS3: -1
PS4: 7
PS5: -1
PS6: -1
Mode10: cer / fadc

Start time (RC GUI):

16:35

Stop time (RC GUI):

17:29

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale

433 k

$e-\pi n$ evts:

1043

SHMS prescale

368 k

$\Sigma e-\pi n$ evts:

1043

COIN pretrig:

977 k

☒ Data ok

☐ Junk

Comments:

1.76 M events

$Q = 119.1 \text{ mC}$

Run Number:

16404

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

PS1: 13
PS2: -1
PS3: -1
PS4: 7
PS5: -1
PS6: -1
Mode10: cer / fadc

Start time (RC GUI):

17:30

Stop time (RC GUI):

18:29

☐ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale

412 k

$e-\pi n$ evts:

1017

SHMS prescale

352 k

$\Sigma e-\pi n$ evts:

2060

COIN pretrig:

936 k

☒ Data ok

☐ Junk

Comments:

1.68 M events

$Q = 113.5 \text{ mC}$

$\Sigma Q = 232.6 \text{ mC}$

Run Number:

16405

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

PS1: 13
PS2: -1
PS3: -1
PS4: 7
PS5: 0
PS6: -1
Mode10: cer / fadc

Start time (RC GUI):

18:30

Stop time (RC GUI):

18:33

☐ Settings Verified?

☒ HV OK?

☐ 50k OK?

HMS prescale

k

$e-\pi n$ evts:

SHMS prescale

k

$\Sigma e-\pi n$ evts:

COIN pretrig:

k

☒ Data ok

☐ Junk

Comments:

MODE-10.

Run Number:

16406

- ☒ 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

$e-\pi n$ evts:

SHMS prescale

k

$\Sigma e-\pi n$ evts:

COIN pretrig:

k

☐ Data ok

☒ Junk

Comments:

HMS-3/4.

Short run to check prescale.
DAQ issues

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Date: 22 09 22
yy mm dd

Initials: GH

Continuation of Configuration:

$Q^2 = 1.60$ $W = 3.06$

low E $\cos\theta = 15.50^\circ$

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

Run Number: 16408	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: <u>13</u> PS2: <u>-1</u> PS3: <u>11</u> PS4: <u>-1</u> PS5: <u>-1</u> PS6: <u>0</u> Mode10: <u>cer</u> fadc	Start time (RC GUI): <u>18:39</u> Stop time (RC GUI): <u>19:00</u>	☐ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale <u>10,565</u> k pretrig: _____ $e-\pi n$ evts: <u>290</u>	SHMS prescale <u>139</u> k pretrig: _____ $\Sigma e-\pi n$ evts: <u>2350</u>	COIN pretrig: <u>369</u> k ☒ Data ok ☐ Junk
Comments: HMS-3/4 RUN $Q = 44.94 \text{ mC}$ $\Sigma Q = 277.5 \text{ mC}$ 3.91 M events							

Run Number: 16409	☒ 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>7</u> PS5: <u>7</u> PS6: <u>-1</u> Mode10: <u>cer</u> fadc	Start time (RC GUI): <u>19:01</u> Stop time (RC GUI): <u>20:00</u>	☐ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale <u>372</u> k pretrig: _____ $e-\pi n$ evts: <u>916</u>	SHMS prescale <u>317</u> k pretrig: _____ $\Sigma e-\pi n$ evts: <u>3266</u>	COIN pretrig: <u>853</u> k ☒ Data ok ☐ Junk
Comments: 1.52M events $Q = 102.2 \text{ mC}$ $\Sigma Q = 379.7 \text{ mC}$							

Run Number: 16410	☒ 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>7</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: <u>cer</u> fadc	Start time (RC GUI): <u>20:00</u> Stop time (RC GUI): <u>20:59</u>	☐ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale <u>465</u> k pretrig: _____ $e-\pi n$ evts: <u>1137</u>	SHMS prescale <u>396</u> k pretrig: _____ $\Sigma e-\pi n$ evts: <u>4403</u>	COIN pretrig: <u>1055</u> k ☒ Data ok ☐ Junk
Comments: 1.89M events. $Q = 127.4 \text{ mC}$ $\Sigma Q = 507.2 \text{ mC}$							

Run Number: 16411	☒ 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>7</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: <u>cer</u> fadc	Start time (RC GUI): <u>21:00</u> Stop time (RC GUI): <u>21:59</u>	☐ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale <u>447</u> k pretrig: _____ $e-\pi n$ evts: <u>1117</u>	SHMS prescale <u>379</u> k pretrig: _____ $\Sigma e-\pi n$ evts: <u>5520</u>	COIN pretrig: <u>1021</u> k ☒ Data ok ☐ Junk
Comments: 1.90M events. $Q = 121.8 \text{ mC}$ $\Sigma Q = 629.0 \text{ mC}$							

Run Number: 16412	☒ 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>7</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: <u>cer</u> fadc	Start time (RC GUI): <u>22:00</u> Stop time (RC GUI): <u>22:08</u>	☐ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale <u>66</u> k pretrig: _____ $e-\pi n$ evts: <u>152</u>	SHMS prescale <u>56</u> k pretrig: _____ $\Sigma e-\pi n$ evts: <u>5672</u>	COIN pretrig: <u>150</u> k ☒ Data ok ☐ Junk
Comments: Stop Run @ SHMS-HB interlock 269 k events $Q = 17.9 \text{ mC}$ $\Sigma Q = 646.9 \text{ mC}$							

Run Number: 16413	☒ 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>7</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: <u>cer</u> fadc	Start time (RC GUI): <u>22:37</u> Stop time (RC GUI): <u>23:31</u>	☐ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale <u>408</u> k pretrig: _____ $e-\pi n$ evts: <u>998</u>	SHMS prescale <u>345</u> k pretrig: _____ $\Sigma e-\pi n$ evts: <u>6671</u>	COIN pretrig: <u>927</u> k ☒ Data ok ☐ Junk
Comments: 1.68M evts $Q = 111.136 \text{ mC}$ $\Sigma Q = 758.059 \text{ mC}$							

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

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Date: 22/08/22
yy mm dd

Initials: GH

Continuation of Configuration:

$Q^2 = 1.60$ $W = 3.06$

low E CENTER (5.500)

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

Run Number: 16414	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: 13 PS2: 7 PS3: 7 PS4: 7 PS5: 0 PS6: 7 Mode10: cep / fadc	Start time (RC GUI): 23:32 Stop time (RC GUI): 00:32:37	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 464 k $e-\pi n$ evts: 1086	SHMS prescale pretrig: 390 k $\Sigma e-\pi n$ evts: 7757	COIN pretrig: 1049 k ☒ Data ok ☐ Junk
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40 MA

$Q = 125.789$
 $\Sigma Q = 483.848 \text{ mC}$

Run Number: 16415	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: 13 PS2: -1 PS3: -1 PS4: 7 PS5: 0 PS6: -1 Mode10: cep / fadc	Start time (RC GUI): 00:33:14 Stop time (RC GUI): 01:33:48	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 455 k $e-\pi n$ evts: 1125	SHMS prescale pretrig: 385 k $\Sigma e-\pi n$ evts: 8882	COIN pretrig: 1032 k ☒ Data ok ☐ Junk
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40 MA

$Q = 124.255$
 $\Sigma Q = 1008.103 \text{ mC}$

Run Number: 16416	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: 13 PS2: -1 PS3: -1 PS4: 7 PS5: 0 PS6: -1 Mode10: cep / fadc	Start time (RC GUI): 01:34:27 Stop time (RC GUI): 02:35:24	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 444 k $e-\pi n$ evts: 1093	SHMS prescale pretrig: 372 k $\Sigma e-\pi n$ evts: 9975	COIN pretrig: 1006 k ☒ Data ok ☐ Junk
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40 MA

$Q = 120.010 \text{ mC}$
 $\Sigma Q = 1128.113 \text{ mC}$

Run Number: 16417	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: 13 PS2: -1 PS3: -1 PS4: 7 PS5: 0 PS6: -1 Mode10: cep / fadc	Start time (RC GUI): 02:36:01 Stop time (RC GUI): 02:56:37	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 146 k $e-\pi n$ evts: 341	SHMS prescale pretrig: 123 k $\Sigma e-\pi n$ evts: 10316	COIN pretrig: 329 k ☒ Data ok ☐ Junk
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40 MA

$Q = 39.661 \text{ mC}$
 $\Sigma Q = 1167.774 \text{ mC}$

Run Number: 16418	☐ LH2 10cm ☐ LD2 10cm ☒ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: 13 PS2: -1 PS3: -1 PS4: 7 PS5: 7 PS6: -1 Mode10: cep / fadc	Start time (RC GUI): 03:06:09 Stop time (RC GUI): 03:23:29	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 21 k $e-\pi n$ evts: 8	SHMS prescale pretrig: 14 k $\Sigma e-\pi n$ evts: 8	COIN pretrig: 21 k ☒ Data ok ☐ Junk
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40 MA

$Q = 18.951 \text{ mC}$
 $\Sigma Q = 18.951 \text{ mC}$

Run Number: 16419	☐ LH2 10cm ☐ LD2 10cm ☒ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: 13 PS2: -1 PS3: -1 PS4: 7 PS5: 7 PS6: -1 Mode10: cep / fadc	Start time (RC GUI): 04:59:17 Stop time (RC GUI): 05:59:15	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 142 k $e-\pi n$ evts: 79	SHMS prescale pretrig: 93 k $\Sigma e-\pi n$ evts: 87	COIN pretrig: 199 k ☒ Data ok ☐ Junk
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40 MA

$Q = 128.369 \text{ mC}$
 $\Sigma Q = 147.320$

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

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Date: 25, 08, 23
yy mm dd

Initials: N.S.

Continuation of Configuration:

$Q^2 = 1.66$, $W = 3.06$, $X = 0.1568$

low z , SHMS center (5.50°)

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

Run Number: 16420	☐ 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>7</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: <u>ce</u> / fadc	Start time (RC GUI): <u>05:59:54</u> Stop time (RC GUI): <u>06:21:57</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: <u>19</u> k $e-\pi n$ evts: <u>6</u>	SHMS prescale pretrig: <u>12</u> k $\Sigma e-\pi n$ evts: <u>93</u>	COIN pretrig: <u>22</u> k ☒ Data ok ☐ Junk
Comments: 40 MA $Q = 16.586 \text{ mC}$ $\Sigma Q = 163.906 \text{ mC}$							

Run Number: 16421	☐ 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>7</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: <u>ce</u> / fadc	Start time (RC GUI): <u>06:36:24</u> Stop time (RC GUI): <u>07:06:15</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: <u>422</u> k $e-\pi n$ evts: <u>508</u>	SHMS prescale pretrig: <u>200h</u> k $\Sigma e-\pi n$ evts: <u>508</u>	COIN pretrig: <u>105</u> k ☒ Data ok ☐ Junk
Comments: 30 MA $Q = 42.685 \text{ mC}$ $\Sigma Q = 42.685 \text{ mC}$							

Run Number: 16422	☐ 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>7</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: <u>ce</u> / fadc	Start time (RC GUI): <u>07:06:56</u> Stop time (RC GUI): <u>07:32:34</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: <u>425</u> k $e-\pi n$ evts: <u>479</u>	SHMS prescale pretrig: <u>206</u> k $\Sigma e-\pi n$ evts: <u>987</u>	COIN pretrig: <u>1152</u> k ☒ Data ok ☐ Junk
Comments: 32 MA $Q = 42.563 \text{ mC}$ $\Sigma Q = 85.648 \text{ mC}$							

Run Number: 16423	☐ 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>7</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: <u>ce</u> / fadc	Start time (RC GUI): <u>07:33:05</u> Stop time (RC GUI): <u>07:57:48</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: <u>419</u> k $e-\pi n$ evts: <u>498</u>	SHMS prescale pretrig: <u>201</u> k $\Sigma e-\pi n$ evts: <u>1485</u>	COIN pretrig: <u>1137</u> k ☒ Data ok ☐ Junk
Comments: 32 MA $Q = 42.033 \text{ mC}$ $\Sigma Q = 127.681 \text{ mC}$							

Run Number: 16424	☐ 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>7</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: <u>ce</u> / fadc	Start time (RC GUI): <u>07:58:31</u> Stop time (RC GUI): <u>08:28:26</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: <u>455</u> k $e-\pi n$ evts: <u>532</u>	SHMS prescale pretrig: <u>238</u> k $\Sigma e-\pi n$ evts: <u>2017</u>	COIN pretrig: <u>1348</u> k ☒ Data ok ☐ Junk
Comments: 32 MA $Q = 49.606 \text{ mC}$ $\Sigma Q = 177.287 \text{ mC}$ 2.577 events							

Run Number: 16425	☐ 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>7</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: <u>ce</u> / fadc	Start time (RC GUI): <u>08:28:57</u> Stop time (RC GUI): <u>08:54:22</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: <u>442</u> k $e-\pi n$ evts: <u>516</u>	SHMS prescale pretrig: <u>213</u> k $\Sigma e-\pi n$ evts: <u>2533</u>	COIN pretrig: <u>1205</u> k ☒ Data ok ☐ Junk
Comments: 32 MA $Q = 44.499 \text{ mC}$ $\Sigma Q = 221.786 \text{ mC}$ 1.877 events							

p(e,e' π)n Run Sheet

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

Date: 22/08/23
yy mm dd

Initials: F.H.

Continuation of Configuration:

$Q^2 = 1.66$, $W = 3.06$, $x = 0.1568$

low E , SHMS center (15.50°)

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

Run Number: 16426	☐ 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>7</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: <u>cer</u> / fadc	Start time (RC GUI): <u>08:54:50</u> Stop time (RC GUI): <u>09:27:15</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale: <u>518</u> k pretrig: _____ $e-\pi n$ evts: <u>602</u>	SHMS prescale: <u>246</u> k pretrig: _____ $\Sigma e-\pi n$ evts: <u>3135</u>	COIN pretrig: <u>1407</u> k ☒ Data ok ☐ Junk
Comments: <u>end of run for roc disconnect, restarted with 2.1 M events</u>							
$Q = 57.51 \text{ mC}$ $\Sigma Q = 273.3 \text{ mC}$							

Run Number: 16427	☐ 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>7</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: <u>cer</u> / fadc	Start time (RC GUI): <u>09:30:25</u> Stop time (RC GUI): <u>09:54:55</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale: <u>413</u> k pretrig: _____ $e-\pi n$ evts: <u>453</u>	SHMS prescale: <u>198</u> k pretrig: _____ $\Sigma e-\pi n$ evts: <u>3588</u>	COIN pretrig: <u>1133</u> k ☒ Data ok ☐ Junk
Comments: <u>1.8 M events</u>							
$Q = 41.354 \text{ mC}$ $\Sigma Q = 314.69 \text{ mC}$							

Run Number: 16428	☐ 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>7</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: <u>cer</u> / fadc	Start time (RC GUI): <u>09:55:22</u> Stop time (RC GUI): <u>10:30:25</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale: <u>450</u> k pretrig: _____ $e-\pi n$ evts: <u>535</u>	SHMS prescale: <u>213</u> k pretrig: _____ $\Sigma e-\pi n$ evts: <u>4123</u>	COIN pretrig: <u>1234</u> k ☒ Data ok ☐ Junk
Comments: <u>1.0 M events</u> <u>stopped run 1.8 M events</u>							
$Q = 44.382 \text{ mC}$ $\Sigma Q = 359.076 \text{ mC}$							

Run Number: 16429	☐ 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>7</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: <u>cer</u> / fadc	Start time (RC GUI): <u>10:30:57</u> Stop time (RC GUI): <u>11:00:00</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale: <u>469</u> k pretrig: _____ $e-\pi n$ evts: <u>565</u>	SHMS prescale: <u>221</u> k pretrig: _____ $\Sigma e-\pi n$ evts: <u>4688</u>	COIN pretrig: <u>1276</u> k ☒ Data ok ☐ Junk
Comments: <u>end of run component disconnected</u> <u>1.9 M events</u>							
$Q = 46.224 \text{ mC}$ $\Sigma Q = 405.200 \text{ mC}$							

Run Number: 16430	☐ 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>7</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: <u>cer</u> / fadc	Start time (RC GUI): <u>11:02:38</u> Stop time (RC GUI): <u>11:16:06</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale: <u>206</u> k pretrig: _____ $e-\pi n$ evts: <u>261</u>	SHMS prescale: <u>98</u> k pretrig: _____ $\Sigma e-\pi n$ evts: <u>4949</u>	COIN pretrig: <u>560</u> k ☒ Data ok ☐ Junk
Comments: <u>854 k event</u>							
$Q = 20.475 \text{ mC}$ $\Sigma Q = 425.775 \text{ mC}$							

Run Number: 16431	☐ 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>7</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: <u>cer</u> / fadc	Start time (RC GUI): <u>11:21:21</u> Stop time (RC GUI): <u> </u>	☐ 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
Comments: <u>BC17 calibration</u>							

p(e,e'π)n Run Sheet

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

Date: 22/08/23
yy mm dd

Initials: F.H

Continuation of Configuration:

$$Q^2 = 1.66, W = 3.06, x = 0.1568$$

low E, SHMS center (5.5°)

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

Run Number: 16432	☐ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ___ cm ☒ Home	PS1: 13 PS2: -1 PS3: -1 PS4: 8 PS5: 0 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 11:26:41 Stop time (RC GUI): 12:53	☒ 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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BCM calibration

Run Number: 16433	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ___ cm ☐ _____	PS1: 13 PS2: -1 PS3: -1 PS4: 8 PS5: 0 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 13:18:48 Stop time (RC GUI): 13:43:27	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 447 k e-πn evts: 513	SHMS prescale pretrig: 212 k Σ e-πn evts: 5462	COIN pretrig: 1215 k ☒ Data ok ☐ Junk
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1.85M events

$$Q = 44.535 \text{ mC}$$

$$\Sigma Q = 470.134 \text{ mC}$$

Run Number: 16434	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ___ cm ☐ _____	PS1: 13 PS2: -1 PS3: -1 PS4: 8 PS5: 0 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 13:44:04 Stop time (RC GUI): 14:12:12	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 488 k e-πn evts: 565	SHMS prescale pretrig: 230 k Σ e-πn evts: 6027	COIN pretrig: 1325 k ☒ Data ok ☐ Junk
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2M events

$$Q = 48.489 \text{ mC}$$

$$\Sigma Q = 518.323 \text{ mC}$$

Run Number: 16435	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ___ cm ☐ _____	PS1: 13 PS2: -1 PS3: -1 PS4: 8 PS5: 0 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 14:12:42 Stop time (RC GUI): 14:42:44	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 262 k e-πn evts: 550	SHMS prescale pretrig: 246 k Σ e-πn evts: 4577	COIN pretrig: 1417 k ☒ Data ok ☐ Junk
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1.9M events

$$Q = 51369$$

$$\Sigma Q = 569.692$$

Run Number: 16436	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ___ cm ☐ _____	PS1: 13 PS2: -1 PS3: -1 PS4: 8 PS5: 0 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 14:43:30 Stop time (RC GUI): 14:48:24	☒ 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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FADC mode 10 run

$$Q =$$

$$\Sigma Q =$$

Run Number: 16437	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ___ cm ☐ _____	PS1: 13 PS2: -1 PS3: 13 PS4: -1 PS5: -1 PS6: 3 Mode10: cer / fadc	Start time (RC GUI): 14:47:00 Stop time (RC GUI): 15:01	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 1528 k e-πn evts:	SHMS prescale pretrig: 111 k Σ e-πn evts:	COIN pretrig: 6681 k ☒ Data ok ☒ Junk
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1.9 events HMS -314 trigger run, coda disconnect end of run
Pre DAQ and L 2 L 1 run DAQ rate below 71 Hz

$$Q = 23.138$$

$$\Sigma Q = 592.83$$

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

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

Date: 22/08/23
yy mm dd

Initials: F.H

Continuation of Configuration:

$$Q^2 = 1.66, W = 3.06, x = 0.1568$$

Low E, SHMS center (5.5°)

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

Run Number: 16438	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ___ cm ☐ _____	PS1: <u>13</u> PS2: <u>-1</u> PS3: <u>13</u> PS4: <u>-1</u> PS5: <u>-1</u> PS6: <u>3</u> Mode10: <u>cer</u> / fadc	Start time (RC GUI): <u>15:12:37</u> Stop time (RC GUI): <u>15:16:00</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: _____ k $e-\pi n$ evts: <u>✓</u>	SHMS prescale pretrig: _____ k $\Sigma e-\pi n$ evts: <u>✓</u>	COIN pretrig: _____ k ☒ Data ok ☒ Junk
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HMS 314 run
1.9M events

PS6=3 → Can't use as physical data

~~DATA~~

Run Number: 16439	☐ 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>15:16:32</u> Stop time (RC GUI): <u>15:49:03</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: <u>265</u> k $e-\pi n$ evts: <u>584</u>	SHMS prescale pretrig: <u>248</u> k $\Sigma e-\pi n$ evts: <u>7161</u>	COIN pretrig: <u>1420</u> k ☒ Data ok ☐ Junk
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1.9M events

$$Q = 51.792$$

$$\Sigma Q = 621.484$$

Run Number: 16440	☐ 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>15:49:35</u> Stop time (RC GUI): <u>16:19:13</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: <u>275</u> k $e-\pi n$ evts: <u>617</u>	SHMS prescale pretrig: <u>256</u> k $\Sigma e-\pi n$ evts: <u>7778</u>	COIN pretrig: <u>1486</u> k ☒ Data ok ☐ Junk
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2.0M events

$$Q = 53.445$$

$$\Sigma Q = 674.929$$

Run Number: 16441	☐ 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>16:20:02</u> Stop time (RC GUI): <u>16:52</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: <u>274</u> k $e-\pi n$ evts: <u>592</u>	SHMS prescale pretrig: <u>255</u> k $\Sigma e-\pi n$ evts: <u>8370</u>	COIN pretrig: <u>1475</u> k ☒ Data ok ☐ Junk
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2.0M events. Ended w/ DAQ error.

$$Q = 53.455$$

$$\Sigma Q = 928.384$$

Run Number: 16442	☐ 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>16:54:10</u> Stop time (RC GUI): <u>17:30:32</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: <u>276</u> k $e-\pi n$ evts: <u>642</u>	SHMS prescale pretrig: <u>257</u> k $\Sigma e-\pi n$ evts: <u>9012</u>	COIN pretrig: <u>14781</u> k ☒ Data ok ☐ Junk
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2.0M events

$$Q = 53.928$$

$$\Sigma Q = 982.312$$

Run Number: 16443	☐ 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>17:31:10</u> Stop time (RC GUI): <u>17:59:34</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: <u>270</u> k $e-\pi n$ evts: <u>624</u>	SHMS prescale pretrig: <u>250</u> k $\Sigma e-\pi n$ evts: <u>9636</u>	COIN pretrig: <u>1463</u> k ☒ Data ok ☐ Junk
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2M events

$$Q = 52.8309$$

$$\Sigma Q = 1034.621$$

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

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

Date: 22/08/23
yy mm dd

Initials: VLT

Continuation of Configuration:

$Q^2 = 1.66$, $X = 3.06$, $x = 0.1568$

low ϵ , SHMS center

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

Run Number: 16444	☒ 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: cer / fadc	Start time (RC GUI): <u>18:00:27</u> Stop time (RC GUI): <u>18:31:16</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale <u>273</u> k pretrig: <u>626</u> $e\pi n$ evts:	SHMS prescale <u>254</u> k pretrig: <u>10262</u> $\Sigma e\pi n$ evts:	COIN pretrig: <u>1474</u> k ☒ Data ok ☐ Junk
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Comments:

2 M events

$\alpha = 53.058$
 $\Sigma \alpha = 1087.679$

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:

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

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

Date: 22/08/23
yy mm dd

Initials: VHT

Continuation of Configuration:

$Q^2 = 1.66$, $1X = 3.06$, $X = 0.1568$

low ϵ , 5Hms left.

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

Run Number: 16449	☐ 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/fadc</u>	Start time (RC GUI): <u>21:24:07</u> Stop time (RC GUI): <u>21:37:19</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: <u>287</u> k $e-\pi n$ evts: <u>312</u>	SHMS prescale pretrig: <u>113</u> k $\Sigma e-\pi n$ evts: <u>1547</u>	COIN pretrig: <u>1648</u> k ☐ Data ok ☐ Junk
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2m events

$Q = 56.717$
 $\Sigma Q = 275.536$

Run Number: 16450	☐ 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/fadc</u>	Start time (RC GUI): <u>21:30:14</u> Stop time (RC GUI): <u>21:53:19</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: <u>316</u> k $e-\pi n$ evts: <u>359</u>	SHMS prescale pretrig: <u>119</u> k $\Sigma e-\pi n$ evts: <u>1906</u>	COIN pretrig: <u>1732</u> k ☒ Data ok ☐ Junk
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2.1m events

$Q = 60.110$
 $\Sigma Q = 335.646$

Run Number: 16451	☐ 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/fadc</u>	Start time (RC GUI): <u>21:54:12</u> Stop time (RC GUI): <u>22:08:51</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: <u>305</u> k $e-\pi n$ evts: <u>331</u>	SHMS prescale pretrig: <u>115</u> k $\Sigma e-\pi n$ evts: <u>2237</u>	COIN pretrig: <u>1674</u> k ☒ Data ok ☐ Junk
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2.0m events

$Q = 58.103$

Run Number: 16452	☐ 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/fadc</u>	Start time (RC GUI): <u>22:10:45</u> Stop time (RC GUI): <u>22:26:23</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: <u>331</u> k $e-\pi n$ evts: <u>374</u>	SHMS prescale pretrig: <u>125</u> k $\Sigma e-\pi n$ evts: <u>2611</u>	COIN pretrig: <u>1807</u> k ☒ Data ok ☐ Junk
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2.2m events

Run Number: 16453	☐ 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/fadc</u>	Start time (RC GUI): <u>22:27:20</u> Stop time (RC GUI): <u>22:41:15</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: <u>307</u> k $e-\pi n$ evts: <u>333</u>	SHMS prescale pretrig: <u>116</u> k $\Sigma e-\pi n$ evts: <u>2944</u>	COIN pretrig: <u>1689</u> k ☒ Data ok ☐ Junk
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2.1m events

$Q = 58.306$

Run Number: 16454	☐ 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>-1</u> PS6: <u>0</u> Mode10: <u>cer/fadc</u>	Start time (RC GUI): <u>22:42:13</u> Stop time (RC GUI): <u>22:55:16</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: <u>303</u> k $e-\pi n$ evts: <u>299</u>	SHMS prescale pretrig: <u>114</u> k $\Sigma e-\pi n$ evts: <u>3243</u>	COIN pretrig: <u>1682</u> k ☒ Data ok ☐ Junk
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2.0m events

p(e,e' π)n Run Sheet

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

Date: 22/08/23
yy mm dd

Initials: VHT

Continuation of Configuration:

$$Q^2 = 1.66, W = 3.06, x = 0.1568$$

Low Q^2 , 5Hms left

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

Run Number: 16455	☐ 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): 22:56:51 Stop time (RC GUI): 23:09:49	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 305 k $e-\pi n$ evts: 276	SHMS prescale pretrig: 115 k $\Sigma e-\pi n$ evts: 3519	COIN pretrig: 1703 k ☒ Data ok ☐ Junk
Comments: 2M events $Q = 57.634$							

Run Number: 16456	☐ 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): 23:10:49 Stop time (RC GUI): 23:23	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 302 k $e-\pi n$ evts: 286	SHMS prescale pretrig: 113 k $\Sigma e-\pi n$ evts: 3805	COIN pretrig: 1675 k ☒ Data ok ☐ Junk
Comments: 2M events $Q = 56.808$							

Run Number: 16457	☐ 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): 23:24:28 Stop time (RC GUI): 23:39:18	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 314 k $e-\pi n$ evts: 169	SHMS prescale pretrig: 116 k $\Sigma e-\pi n$ evts: 3974	COIN pretrig: 1708 k ☒ Data ok ☐ Junk
Comments: 1M events. DAQ stopped at end. $Q = 58.966$							

Run Number: 16458 -60	☐ 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): Stop time (RC GUI): 	☐ 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: Junk							

Run Number: 16461	☐ 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): 0:12 Stop time (RC GUI): 0:26	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 306 k $e-\pi n$ evts: 292	SHMS prescale pretrig: 112 k $\Sigma e-\pi n$ evts: 4266	COIN pretrig: 1672 k ☒ Data ok ☐ Junk
Comments: 2M events $Q = 56.447$ $\Sigma Q = 802.264$							

Run Number: 16462	☐ 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): 0:27 Stop time (RC GUI): 0:43	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 307 k $e-\pi n$ evts: 330	SHMS prescale pretrig: 113 k $\Sigma e-\pi n$ evts: 4596	COIN pretrig: 1684 k ☒ Data ok ☐ Junk
Comments: 2M evts $Q = 57.449$ $\Sigma Q = 859.713$							

p(e,e' π)n Run Sheet

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

Date: 02/08/24
yy mm dd

Initials: NBL

Continuation of Configuration:

$Q^2 = 1.66$, $M = 3.06$, $x = 0.1568$
low E , SHMS left

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

Run Number: 16463	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: 14 PS2: 1 PS3: 1 PS4: 10 PS5: 0 PS6: 1 Mode10: cep / fadc	Start time (RC GUI): 0:44 Stop time (RC GUI): 1:01	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 88 k $e-\pi$ evts: 403	SHMS prescale pretrig: 64 k $\Sigma e-\pi$ evts: 4999	COIN pretrig: 1877 k ☒ Data ok ☐ Junk
Comments: changed prescales to get 100Hz 2M evts $Q = 64.794$ $\Sigma Q = 924.507$							

Run Number: 16464	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: 14 PS2: 1 PS3: 1 PS4: 10 PS5: 0 PS6: 1 Mode10: cep / fadc	Start time (RC GUI): 1:02 Stop time (RC GUI): 1:18	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 87 k $e-\pi$ evts: 358	SHMS prescale pretrig: 63 k $\Sigma e-\pi$ evts: 5357	COIN pretrig: 1874 k ☒ Data ok ☐ Junk
Comments: 2M evts $Q = 63.694$ $\Sigma Q = 988.206$							

Run Number: 16465	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: 14 PS2: 1 PS3: 1 PS4: 10 PS5: 0 PS6: 1 Mode10: cep / fadc	Start time (RC GUI): 1:19 Stop time (RC GUI): 1:34	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 66 k $e-\pi$ evts: 356	SHMS prescale pretrig: 62 k $\Sigma e-\pi$ evts: 5713 5713	COIN pretrig: 1891 k ☒ Data ok ☐ Junk
Comments: 2M evts. $Q = 63.089$ $\Sigma Q = 1051.295$							

Run Number: 16466	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: 14 PS2: 1 PS3: 1 PS4: 10 PS5: 0 PS6: 1 Mode10: cep / fadc	Start time (RC GUI): 1:34 Stop time (RC GUI): 1:51	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 94 k $e-\pi$ evts: 408	SHMS prescale pretrig: 68 k $\Sigma e-\pi$ evts: 6121	COIN pretrig: 2047 k ☒ Data ok ☐ Junk
Comments: 2.1 M evts $Q = 69.213$ $\Sigma Q = 1120.508$							

Run Number: 16467	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: 14 PS2: 1 PS3: 1 PS4: 10 PS5: 0 PS6: 1 Mode10: cep / fadc	Start time (RC GUI): 1:52 Stop time (RC GUI): 2:14	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 94 k $e-\pi$ evts: 414	SHMS prescale pretrig: 68 k $\Sigma e-\pi$ evts: 6535	COIN pretrig: 1993 k ☒ Data ok ☐ Junk
Comments: 2.1 M evts $Q = 69.161$ $\Sigma Q = 1189.664$							

Run Number: 16468	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: 14 PS2: 1 PS3: 1 PS4: 10 PS5: 0 PS6: 1 Mode10: cep / fadc	Start time (RC GUI): 2:14 Stop time (RC GUI): 2:30	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 92 k $e-\pi$ evts: 450	SHMS prescale pretrig: 67 k $\Sigma e-\pi$ evts: 6985	COIN pretrig: 2007 k ☒ Data ok ☐ Junk
Comments: Code Crash on exit $Q = 67.645$ $\Sigma Q = 1257.364$							

p(e,e' π)n Run Sheet

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

Date: 22/06/24
yy mm dd

Initials: NH

Continuation of Configuration:

$Q^2 = 1.66$, $W = 3.06$, $x = 0.1568$
low ϵ , SHMS left

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

Run Number: 16469	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: 14 PS2: 1 PS3: 10 PS4: 0 PS5: 0 PS6: 0 Mode10: 60 / fadc	Start time (RC GUI): 2:34 Stop time (RC GUI): 2:50	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale 86 k pretrig: $e-\pi n$ evts: 351	SHMS prescale 62 k pretrig: $\Sigma e-\pi n$ evts: 7336	COIN pretrig: 1878 k ☒ Data ok ☐ Junk
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2 M evts

$Q = 63.149$ mC
 $\Sigma Q = 1320.512$ mC

Run Number: 16470	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: 14 PS2: 1 PS3: 10 PS4: 0 PS5: 0 PS6: 0 Mode10: 60 / fadc	Start time (RC GUI): 2:51 Stop time (RC GUI): 3:12	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale 87 k pretrig: $e-\pi n$ evts: 378	SHMS prescale 63 k pretrig: $\Sigma e-\pi n$ evts: 7714	COIN pretrig: 1896 k ☒ Data ok ☐ Junk
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2.1 M evts

$Q = 69.004$ mC
 $\Sigma Q = 1389.521$ mC

Run Number: 16471	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: 14 PS2: 1 PS3: 10 PS4: 0 PS5: 0 PS6: 0 Mode10: 60 / fadc	Start time (RC GUI): 3:12 Stop time (RC GUI): 3:37	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale 87 k pretrig: $e-\pi n$ evts: 340	SHMS prescale 63 k pretrig: $\Sigma e-\pi n$ evts: 8054	COIN pretrig: 1896 k ☒ Data ok ☐ Junk
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1.49 M evts

$Q = 63.878$ mC
 $\Sigma Q = 1453.399$ mC

Run Number: 16472	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: 14 PS2: 1 PS3: 10 PS4: 0 PS5: 0 PS6: 0 Mode10: 60 / 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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HMS 3/4 run

Junk Bad prescale

Run Number: 16473	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: 11 PS2: 1 PS3: 12 PS4: 1 PS5: 0 PS6: 0 Mode10: 60 / fadc	Start time (RC GUI): 5:47 Stop time (RC GUI): 6:03	☒ Settings Verified? ☒ HV OK? ☐ 50k OK?	HMS prescale k pretrig: $e-\pi n$ evts: 161	SHMS prescale 124 k pretrig: $\Sigma e-\pi n$ evts: 8215	COIN pretrig: 142 k ☒ Data ok ☐ Junk
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HMS 3/4 run

23 μ A current

code failed on exit

$Q = 19.369$ mC
 $Q_T = 1472.768$ mC
2 M evts

Run Number: 16474	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: 11 PS2: 1 PS3: 12 PS4: 1 PS5: 0 PS6: 0 Mode10: 60 / fadc	Start time (RC GUI): 6:05 Stop time (RC GUI): ~6:22	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale k pretrig: $e-\pi n$ evts: 163	SHMS prescale 139 k pretrig: $\Sigma e-\pi n$ evts: 8378	COIN pretrig: k ☒ Data ok ☐ Junk
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HMS 3/4

23 μ A current

code failed on exit

$Q = 20.174$ mC
 $Q_T = 1492.942$ mC
2 M evts

p(e,e' π)n Run Sheet

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

Date: 22/08/24
yy mm dd

Initials: N14

Continuation of Configuration:

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

$Q^2 = 1.66$, $W = 3.06$, $x = 0.1568$
low ϵ , SHMS 6F6

Run Number: 16475	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: 14 PS2: \ PS3: \ PS4: 10 PS5: 0 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 6:25 Stop time (RC GUI): 6:41	☒ Settings Verified? ☐ HV OK? ☒ 50k OK?	HMS prescale 89 k pretrig: $e-\pi n$ evts: 402	SHMS prescale 64 k pretrig: $\Sigma e-\pi n$ evts: 8780	COIN pretrig: 1908 k ☒ Data ok ☐ Junk
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2 M evts

$Q = 65.286$
 $\Sigma Q = 1558.228$

Run Number: 16476	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: 14 PS2: \ PS3: \ PS4: 10 PS5: 0 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 6:41 Stop time (RC GUI): 6:58	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale 92 k pretrig: $e-\pi n$ evts: 399	SHMS prescale 67 k pretrig: $\Sigma e-\pi n$ evts: 9179	COIN pretrig: 2011 k ☒ Data ok ☐ Junk
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2.14 evts

$Q = 67.628$
 $\Sigma Q = 1625.856$

Run Number: 16477	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: 14 PS2: \ PS3: \ PS4: 10 PS5: 0 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 6:58 Stop time (RC GUI): 7:16	☒ Settings Verified? ☒ HV OK? ☐ 50k OK?	HMS prescale 88 k pretrig: $e-\pi n$ evts: 376	SHMS prescale 64 k pretrig: $\Sigma e-\pi n$ evts: 9555	COIN pretrig: 1903 k ☒ Data ok ☐ Junk
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2 M evts

$Q = 64.751$
 $\Sigma Q = 1690.607$

Run Number: 16478	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: 14 PS2: \ PS3: \ PS4: 10 PS5: 0 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 7:16 Stop time (RC GUI): 7:23	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale 33 k pretrig: $e-\pi n$ evts: 140	SHMS prescale 24 k pretrig: $\Sigma e-\pi n$ evts: 9695	COIN pretrig: 705 k ☒ Data ok ☐ Junk
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Ended due to SHMS Q3 interlock
748k evts

$Q = 24.412$
 $\Sigma Q = 1715.019$

Run Number: 16479	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: 14 PS2: \ PS3: \ PS4: 10 PS5: 0 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 7:52 Stop time (RC GUI): 7:55	☒ 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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FADC mode 10

Run Number: 16480	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: 14 PS2: \ PS3: \ PS4: 10 PS5: 0 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 7:55 Stop time (RC GUI): 8:14	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale 101 k pretrig: $e-\pi n$ evts: 439	SHMS prescale 73 k pretrig: $\Sigma e-\pi n$ evts: 10134	COIN pretrig: 2201 k ☒ Data ok ☐ Junk
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2-3 M events

$Q = 74.094$
 $\Sigma Q = 1789.113$

p(e,e' π)n Run Sheet

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

Date: 22/08/24
yy mm dd

Initials: PD

Continuation of Configuration:

$Q^2 = 1.60$, $W = 3.06$, $\alpha = 0.1568$,

low ϵ data taking, SHMS left

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

Run Number: 16481	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: 14 PS2: -1 PS3: -1 PS4: 10 PS5: 0 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 08:15:32 Stop time (RC GUI): 08:29:00	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale 88 k pretrig: $e-\pi n$ evts: 409	SHMS prescale 97 k pretrig: $\Sigma e-\pi n$ evts: 10543	COIN pretrig: 2937 k ☐ Data ok ☐ Junk
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CodaRcEnd service failed while trying to stop the run. Had to reset.
2.52M events $Q = 65.094$, $\Sigma Q = 1854.207$

Run Number: 16482	☐ 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 88 k pretrig: $e-\pi n$ evts:	SHMS prescale 97 k pretrig: $\Sigma e-\pi n$ evts:	COIN pretrig: 2937 k ☐ Data ok ☒ Junk
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Bread started this run remotely to check a few things.

Run Number: 16483	☐ LH2 10cm ☐ LD2 10cm ☒ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: 9 PS2: -1 PS3: -1 PS4: 6 PS5: 0 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 09:33:03 Stop time (RC GUI): 09:58:19	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale 111 k pretrig: $e-\pi n$ evts: 21	SHMS prescale 146 k pretrig: $\Sigma e-\pi n$ evts:	COIN pretrig: 23 k ☒ Data ok ☐ Junk
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$Q = 17.676$ mc

Run Number: 16484	☐ LH2 10cm ☐ LD2 10cm ☒ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: 9 PS2: -1 PS3: -1 PS4: 6 PS5: 0 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 09:58:55 Stop time (RC GUI): 10:06:51	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale 9 k pretrig: $e-\pi n$ evts: 1	SHMS prescale 12 k pretrig: $\Sigma e-\pi n$ evts:	COIN pretrig: 5 k ☐ Data ok ☐ Junk
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dummy

No beam for long time

$Q = 3.932$ mc

Run Number: 16485	☐ LH2 10cm ☐ LD2 10cm ☒ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: 9 PS2: -1 PS3: -1 PS4: 6 PS5: 0 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 10:11:08 Stop time (RC GUI): 10:31:27	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale 107 k pretrig: $e-\pi n$ evts: 21	SHMS prescale 141 k pretrig: $\Sigma e-\pi n$ evts:	COIN pretrig: 20 k ☒ Data ok ☐ Junk
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dummy

$Q = 45.878$ mc
 $\Sigma Q = 97.486$ mc (dummy)

Run Number: 16486	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: 13 PS2: -1 PS3: -1 PS4: 9 PS5: 0 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 15:45:01 Stop time (RC GUI): 15:49:07	☒ 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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FADC MODE 10 run

57K events
~2 min with ~~not~~ on beam

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

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

Date: 22/08/24
yy mm dd

Initials: PD

Continuation of Configuration:

$Q=21.60$, $W=8.06$, $x=0.1568$

low ϵ , 5HMS left

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

Run Number: 16487	☐ 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: _____ $e-\pi n$ evts: _____	SHMS prescale pretrig: _____ $\Sigma e-\pi n$ evts: _____	COIN pretrig: _____ k ☐ Data ok ☒ Junk
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Junk — Junk — Junk.

Run Number: 16488	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: 13 PS2: -1 PS3: -1 PS4: 9 PS5: 0 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 16:01 Stop time (RC GUI): 16:36	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 119 k $e-\pi n$ evts: 642	SHMS prescale pretrig: 138 k $\Sigma e-\pi n$ evts: 642	COIN pretrig: 743 k ☒ Data ok ☐ Junk
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80mA $Q=122.058$ mC

Run Number: 16489	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: 13 PS2: -1 PS3: -1 PS4: 9 PS5: 0 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 16:36 Stop time (RC GUI): 17:18	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 152 k $e-\pi n$ evts: 854	SHMS prescale pretrig: 180 k $\Sigma e-\pi n$ evts: 1496	COIN pretrig: 988 k ☒ Data ok ☐ Junk
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80mA $Q=156.778$ mC
 $\Sigma Q=278.836$ mC

Run Number: 16490	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: 13 PS2: -1 PS3: -1 PS4: 9 PS5: 0 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 17:18 Stop time (RC GUI): 18:01	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 140 k $e-\pi n$ evts: 764	SHMS prescale pretrig: 165 k $\Sigma e-\pi n$ evts: 2260	COIN pretrig: 893 k ☒ Data ok ☐ Junk
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80µA $Q=144.2$ mC
 $\Sigma Q=423.011$ mC

Run Number: 16491	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: 13 PS2: -1 PS3: -1 PS4: 9 PS5: 0 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 18:02 Stop time (RC GUI): 18:35	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 146 k $e-\pi n$ evts: 746	SHMS prescale pretrig: 174 k $\Sigma e-\pi n$ evts: 3006	COIN pretrig: 959 k ☒ Data ok ☐ Junk
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80µA $Q=151.032$ mC
 $\Sigma Q=574.043$ mC

Run Number: 16492	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: 13 PS2: -1 PS3: -1 PS4: 9 PS5: 0 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 18:36 Stop time (RC GUI): 19:02	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 112 k $e-\pi n$ evts: 586	SHMS prescale pretrig: 131 k $\Sigma e-\pi n$ evts: 3592	COIN pretrig: 729 k ☒ Data ok ☐ Junk
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80mA $Q=114.3$ mC
 $\Sigma Q=688.326$ mC

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

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

Date: 22 / 08 / 24
yy mm dd

Initials: Iu.S.

Continuation of Configuration:

$Q^2 = 1.6$, $W = 3.06$, $x = 0.1568$

low ϵ , SHMS left

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

Run Number:

16493

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

PS1: 13
PS2: -1
PS3: -1
PS4: 9
PS5: 0
PS6: -1
Mode10: 0 fadc

Start time (RC GUI):

19:03

Stop time (RC GUI):

19:30

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

HMS prescale 94 k
pretrig:

$e-\pi n$ evts:

534

SHMS prescale 111 k
pretrig:

$\Sigma e-\pi n$ evts:

4126

COIN pretrig: 605 k

- ☒ Data ok
☐ Junk

Comments:

80 μ A

$Q = 96.5$ mC
 $\Sigma Q = 784.831$ mC

Run Number:

16494

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

PS1: 13
PS2: -1
PS3: -1
PS4: 9
PS5: 0
PS6: -1
Mode10: 0 fadc

Start time (RC GUI):

19:31

Stop time (RC GUI):

20:19

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

HMS prescale 141 k
pretrig:

$e-\pi n$ evts:

750

SHMS prescale 165 k
pretrig:

$\Sigma e-\pi n$ evts:

4876

COIN pretrig: 902 k

- ☒ Data ok
☐ Junk

Comments:

80 μ A

$Q = 144.121$ mC
 $\Sigma Q = 928.952$ mC

Run Number:

16495

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

PS1: 13
PS2: -1
PS3: -1
PS4: 9
PS5: 0
PS6: -1
Mode10: 0 fadc

Start time (RC GUI):

20:20

Stop time (RC GUI):

20:48

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

HMS prescale 113 k
pretrig:

$e-\pi n$ evts:

622

SHMS prescale 133 k
pretrig:

$\Sigma e-\pi n$ evts:

5498

COIN pretrig: 728 k

- ☒ Data ok
☐ Junk

Comments:

80 μ A

$Q = 115.840$ mC
 $\Sigma Q = 1044.792$ mC

Run Number:

16496

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

PS1: 13
PS2: -1
PS3: 12
PS4: -1
PS5: -1
PS6: 0
Mode10: 0 fadc

Start time (RC GUI):

20:51

Stop time (RC GUI):

21:04

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

HMS prescale 7858 k
pretrig:

$e-\pi n$ evts:

183

SHMS prescale 31 k
pretrig:

$\Sigma e-\pi n$ evts:

5681

COIN pretrig: 102 k

- ☒ Data ok
☐ Junk

Comments:

45 μ A

HMS 3/4 trigger run DAQ rate ~ 2 kHz
live time 100%

$Q = 31.361$ mC
 $\Sigma Q = 1076.153$ mC

Run Number:

16497

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

PS1: 13
PS2: -1
PS3: 12
PS4: -1
PS5: -1
PS6: 0
Mode10: 0 fadc

Start time (RC GUI):

21:04

Stop time (RC GUI):

21:22

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

HMS prescale 10854 k
pretrig:

$e-\pi n$ evts:

253

SHMS prescale 42 k
pretrig:

$\Sigma e-\pi n$ evts:

5934

COIN pretrig: 141 k

- ☒ Data ok
☐ Junk

Comments:

45 μ A

HMS 3/4 trigger run DAQ rate ~ 2 kHz
live time 100%

$Q = 43.075$ mC
 $\Sigma Q = 1119.228$ mC

Run Number:

16498

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

PS1: 13
PS2: -1
PS3: 12
PS4: -1
PS5: -1
PS6: 0
Mode10: 0 fadc

Start time (RC GUI):

21:22

Stop time (RC GUI):

21:43

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

HMS prescale 12110 k
pretrig:

$e-\pi n$ evts:

264

SHMS prescale 48 k
pretrig:

$\Sigma e-\pi n$ evts:

6198

COIN pretrig: 158 k

- ☒ Data ok
☐ Junk

Comments:

45 μ A

HMS 3/4 trigger run DAQ rate ~ 2 kHz
live time 100%

$Q = 48.568$ mC
 $\Sigma Q = 1167.796$ mC

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

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

Date: 22/08/24
yy mm dd

Initials: Iu.S.

Continuation of Configuration:

$Q^2 = 1.6$, $W = 3.06$, $X = 0.1568$

low E , SNS left

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

Run Number:

16499

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

PS1: 13
PS2: -1
PS3: -1
PS4: 9
PS5: 0
PS6: -1
Mode10: cer / fadc

Start time (RC GUI):

21:45

Stop time (RC GUI):

22:19

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

HMS prescale
pretrig: 125 k

$e-\pi n$ evts:
674

SHMS prescale
pretrig: 145 k

$\Sigma e-\pi n$ evts:
6872

COIN pretrig: 788 k

- ☒ Data ok
☐ Junk

Comments:

80 μ A

$Q = 127.066$ mC
 $\Sigma Q = 1294.862$ mC

Run Number:

16500

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

PS1: 13
PS2: -1
PS3: -1
PS4: 9
PS5: 0
PS6: -1
Mode10: cer / fadc

Start time (RC GUI):

22:20

Stop time (RC GUI):

22:52

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

HMS prescale
pretrig: 121 k

$e-\pi n$ evts:
615

SHMS prescale
pretrig: 143 k

$\Sigma e-\pi n$ evts:
7487

COIN pretrig: 780 k

- ☒ Data ok
☐ Junk

Comments:

80 μ A

$Q = 124.863$ mC
 $\Sigma Q = 1419.725$ mC

Run Number:

16501

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

PS1: 13
PS2: -1
PS3: -1
PS4: 9
PS5: 0
PS6: -1
Mode10: cer / fadc

Start time (RC GUI):

22:52

Stop time (RC GUI):

23:22

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

HMS prescale
pretrig: 119 k

$e-\pi n$ evts:
613

SHMS prescale
pretrig: 140 k

$\Sigma e-\pi n$ evts:
8100

COIN pretrig: 769 k

- ☒ Data ok
☐ Junk

Comments:

80 μ A

$Q = 122.2$ mC
 $\Sigma Q = 1541.925$ mC

Run Number:

16502

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

PS1: 13
PS2: -1
PS3: -1
PS4: 9
PS5: 0
PS6: -1
Mode10: cer / fadc

Start time (RC GUI):

23:22

Stop time (RC GUI):

00:01

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

HMS prescale
pretrig: 117 k

$e-\pi n$ evts:
564

SHMS prescale
pretrig: 137 k

$\Sigma e-\pi n$ evts:
8664

COIN pretrig: 751 k

- ☒ Data ok
☐ Junk

Comments:

80 μ A

$Q = 119.184$
 $\Sigma Q = 1661.109$

Run Number:

16503

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

PS1: 13
PS2: -1
PS3: -1
PS4: 9
PS5: 0
PS6: -1
Mode10: cer / fadc

Start time (RC GUI):

00:02

Stop time (RC GUI):

0:33

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

HMS prescale
pretrig: 117 k

$e-\pi n$ evts:
618

SHMS prescale
pretrig: 137 k

$\Sigma e-\pi n$ evts:
9282

COIN pretrig: 751 k

- ☒ Data ok
☐ Junk

Comments:

80 μ A

$Q = 119.47$
 $\Sigma Q = 1780.588$

Run Number:

16504

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

PS1: 13
PS2: -1
PS3: -1
PS4: 9
PS5: 0
PS6: -1
Mode10: cer / fadc

Start time (RC GUI):

0:33

Stop time (RC GUI):

1:01

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

HMS prescale
pretrig: 116 k

$e-\pi n$ evts:
601

SHMS prescale
pretrig: 136 k

$\Sigma e-\pi n$ evts:
9883

COIN pretrig: 753 k

- ☒ Data ok
☐ Junk

Comments:

80 μ A

$Q = 118.304$
 $Q = 1898.892$

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

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

Date: 22/08/25
yy mm dd

Initials: NH

Continuation of Configuration:

$Q^2 = 1.6$ $W = 3.06$ $x = 0.1568$

low ϵ , shms left

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

Run Number: <u>16505</u>	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: <u>13</u> PS2: <u>X</u> PS3: <u>9</u> PS4: <u>9</u> PS5: <u>0</u> PS6: <u>1</u> Mode10: cer / fadc	Start time (RC GUI): <u>1:01</u> Stop time (RC GUI): <u>1:33</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: <u>121</u> k $e-\pi n$ evts: <u>652</u>	SHMS prescale pretrig: <u>143</u> k $\Sigma e-\pi n$ evts: <u>10535</u>	COIN pretrig: <u>788</u> k ☒ Data ok ☐ Junk
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$Q = 124.123$
 $\Sigma Q = 2023.015$ mC

Run Number: <u>16506</u>	☐ 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 $e-\pi n$ evts: _____	SHMS prescale pretrig: _____ k $\Sigma e-\pi n$ evts: _____	COIN pretrig: _____ k ☐ Data ok ☐ Junk
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Junk due to prescales

Run Number: <u>16507</u>	☐ LH2 10cm ☐ LD2 10cm ☒ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: <u>9</u> PS2: <u>X</u> PS3: <u>6</u> PS4: <u>6</u> PS5: <u>0</u> PS6: <u>1</u> Mode10: cer / fadc	Start time (RC GUI): <u>1:41</u> Stop time (RC GUI): <u>2:43</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: <u>295</u> k $e-\pi n$ evts: <u>53</u>	SHMS prescale pretrig: <u>393</u> k $\Sigma e-\pi n$ evts: <u>96</u>	COIN pretrig: <u>37</u> k ☒ Data ok ☐ Junk
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$Q = 128.395$
Dummy $\Sigma Q = 225.881$ 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 $e-\pi n$ evts: _____	SHMS prescale pretrig: _____ k $\Sigma e-\pi n$ evts: _____	COIN pretrig: _____ k ☐ Data ok ☐ Junk
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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 $e-\pi n$ evts: _____	SHMS prescale pretrig: _____ k $\Sigma e-\pi n$ evts: _____	COIN pretrig: _____ k ☐ Data ok ☐ Junk
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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 $e-\pi n$ evts: _____	SHMS prescale pretrig: _____ k $\Sigma e-\pi n$ evts: _____	COIN pretrig: _____ k ☐ Data ok ☐ Junk
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