

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

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

Date: 22/07/31
yy mm dd

Initials: I.U.S.

Use a separate sheet for each configuration.

Configuration Name:

$Q^2=3.85$, $W=3.07$, $x=0.31$
high E , SHMS ~~right~~

E_{beam} : 10.55 GeV

I_{beam} : 45 μA

Purpose:

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

Raster: ☒ On ☐ Off
Size: 2x2

Beam position and angle on target:

3H07A	X	Y
<u>-0.104</u>	mm	<u>-0.296</u> mm
Nomin:	<u>-0.03</u>	Nomin: <u>-0.3</u>
3H07C	X	Y
<u>-0.690</u>	mm	<u>-0.497</u> mm
Nomin:	<u>-0.66</u>	Nomin: <u>-0.49</u>

HMS

SHMS

Q1	I-SET (from PSU)	A	I-SET (from PSU)	A	HB
	B-HALL	<u>513.8360</u>	B-HALL	<u>2206.7000</u>	
Q2	I-SET (from PSU)	A	I-SET (from PSU)	A	Q1
	B-HALL	<u>0.67760</u>	B-HALL	<u>-13.952</u>	
Q3	I-SET (from PSU)	A	I-SET (from PSU)	A	Q2
	B-HALL	<u>408.5740</u>	B-HALL	<u>1376.5800</u>	
D	I-SET (from PSU)	A	I-SET (from PSU)	A	Q3
	B-HALL	<u>-0.78916</u>	B-HALL	<u>9.794</u>	
D	I-SET (from PSU)	A	I-SET (from PSU)	A	D
	B-HALL	<u>199.6790</u>	B-HALL	<u>2305.8300</u>	
D	I-READ	A	I-SET (from PSU)	A	D
	B-NMR	<u>1209.51</u>	B-HALL	<u>1517.2200</u>	
D	I-SET (from PSU)	A	I-SET (from PSU)	A	D
	B-NMR	<u>1.079720</u>	B-HALL	<u>-14.623</u>	
D	If momentum increased:		I-SET (from PSU)	A	D
	☐ HMS cycled?		B-NMR	<u>2086.0200</u>	
D	☒ SHMS cycled?		B-NMR	<u>15.110</u>	D
			B-NMR		

Run Number:

15843

- ☒ 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):

18:07

Stop time (RC GUI):

18:56

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

HMS prescale
pretrig: 136 k

$e-\pi n$ evts:

5846

SHMS prescale
pretrig: 92 k

$\Sigma e-\pi n$ evts:

—

COIN pretrig: 485 k

- ☒ Data ok
☐ Junk

Comments:

$Q=102.509\text{mc}$

Run Number:

15844

- ☒ 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):

18:57:50

Stop time (RC GUI):

19:00:24

- ☒ 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:

fadcmode 10

Run Number:

15845

- ☒ 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):

19:01

Stop time (RC GUI):

19:56

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

HMS prescale
pretrig: 170 k

$e-\pi n$ evts:

7017

SHMS prescale
pretrig: 118 k

$\Sigma e-\pi n$ evts:

12863

COIN pretrig: 734 k

- ☒ Data ok
☐ Junk

Comments:

$Q=128.934\text{mc}$
 $\Sigma Q=231.443\text{mc}$

Run Number:

15846

- ☒ 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):

19:56

Stop time (RC GUI):

20:51

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

HMS prescale
pretrig: 163 k

$e-\pi n$ evts:

6788

SHMS prescale
pretrig: 112 k

$\Sigma e-\pi n$ evts:

19651

COIN pretrig: 669 k

- ☒ Data ok
☐ Junk

Comments:

$Q=123.253\text{mc}$
 $\Sigma Q=351.696\text{mc}$

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

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Date: 22/07/31
yy mm dd

Initials: Iu.S

Continuation of Configuration:

$Q=3.85$, $W=3.07$, $X=0.31$
high E , SHMS right

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

Run Number: 15847	☒ 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): 20:52 Stop time (RC GUI): 21:38	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 112 k $e-\pi n$ evts: 4801	SHMS prescale pretrig: 77 k $\Sigma e-\pi n$ evts: 24452	COIN pretrig: 452 k ☒ Data ok ☐ Junk
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$Q = 85.140 \text{ mC}$
 $\Sigma Q = 439.836 \text{ mC}$

Run Number: 15848	☒ 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): 21:38 Stop time (RC GUI): 22:09	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 108 k $e-\pi n$ evts: 4507	SHMS prescale pretrig: 75 k $\Sigma e-\pi n$ evts: 28959	COIN pretrig: 440 k ☒ Data ok ☐ Junk
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$Q = 81.951 \text{ mC}$
 $\Sigma Q = 521.787 \text{ mC}$

Run Number: 15849	☒ 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): 22:09 Stop time (RC GUI): 22:42	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 107 k $e-\pi n$ evts: 4383	SHMS prescale pretrig: 75 k $\Sigma e-\pi n$ evts: 33342	COIN pretrig: 474 k ☒ Data ok ☐ Junk
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$Q = 80.964 \text{ mC}$
 $\Sigma Q = 602.751 \text{ mC}$

Run Number: 15850	☒ 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): 22:43 Stop time (RC GUI): 23:08	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 40 k $e-\pi n$ evts: 1681	SHMS prescale pretrig: 28 k $\Sigma e-\pi n$ evts: 35023	COIN pretrig: 187 k ☒ Data ok ☐ Junk
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The beam was gone, so I stopped the run.
12 min of beam.

$Q = 30.395 \text{ mC}$
 $\Sigma Q = 633.146 \text{ mC}$

Run Number: 15851	☒ 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): 00:33 Stop time (RC GUI): 01:35	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 182 k $e-\pi n$ evts: 7448	SHMS prescale pretrig: 127 k $\Sigma e-\pi n$ evts: 42471	COIN pretrig: 811 k ☒ Data ok ☐ Junk
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This run is ok (1115875 evts)
even though the header says JUNK

$\Sigma Q = 771.413 \text{ mC}$ $Q = 138.267 \text{ mC}$

Run Number: 15852	☐ 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): 01:48 Stop time (RC GUI): 02:35	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 49 k $e-\pi n$ evts: 475	SHMS prescale pretrig: 20 k $\Sigma e-\pi n$ evts: 475	COIN pretrig: 67 k ☒ Data ok ☐ Junk
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Dummy 10cm @ 110...
 $Q = 103.402 \text{ mC}$

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

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

Date: 22 / 08 / 01
yy mm dd

Initials: KAA

Continuation of Configuration:

$Q = 3.85, W = 3.07, X = 0.31$

high E, SHMS right.

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

Run Number: 15853	☐ 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): 02:45 Stop time (RC GUI): 03:50	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 355 k $e-\pi n$ evts: 9251	SHMS prescale pretrig: 437 k $\Sigma e-\pi n$ evts: 9251	COIN pretrig: 1782 k ☒ Data ok ☐ Junk
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Comments:

LD2, start at 40 μA

$Q = 130.081 \text{ mC}$
 $\Sigma Q = 130.081 \text{ mC}$

Run Number: 15854	☐ 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): 03:50:38 Stop time (RC GUI): 05:03	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 325 k $e-\pi n$ evts: 8407	SHMS prescale pretrig: 400 k $\Sigma e-\pi n$ evts: 17658	COIN pretrig: 1631 k ☒ Data ok ☐ Junk
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Comments:

run ended because (2341893 evts) $\Sigma Q = 248.940 \text{ mC}$, $Q = 118.859 \text{ mC}$
MCC says there is a radiation warning

Run Number: 15855	☐ 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): 14:26 Stop time (RC GUI): 15:26	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 226 k $e-\pi n$ evts: 5874	SHMS prescale pretrig: 278 k $\Sigma e-\pi n$ evts: 23532	COIN pretrig: 1103 k ☒ Data ok ☐ Junk
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Comments:

$\Sigma Q = 334.575$

$Q = 82.635$

Run Number: 15856	☐ 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): 15:27 Stop time (RC GUI): 15:36	☒ 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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Comments:

40 $\rightarrow$ 10 μA

fadc mode 10 ... bit longer b/c no beam for large amounts of time

Run Number: 15857	☐ 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): 15:36 Stop time (RC GUI): 15:37	☐ 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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Comments:

10 μA beam (storm) ... adjust PS values needed junk

Run Number: 15858	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: 11 PS2: -1 PS3: -1 PS4: 6 PS5: 0 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 15:39 Stop time (RC GUI): 15:51	☒ 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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Comments:

Junk run, Beam was OFF all time

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

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

Date: 22/08/01
yy mm dd

Initials: H.M.

Continuation of Configuration:

$Q^2 = 3.85$, $W = 3.07$, $X = 0.35$
high ϵ , stems right

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

Run Number: 15859	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: 11 PS2: -1 PS3: -1 PS4: 6 PS5: 6 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 00:27 Stop time (RC GUI): 00:58	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 68 k $e-\pi n$ evts: 481	SHMS prescale pretrig: 85 k $\Sigma e-\pi n$ evts: 24013	COIN pretrig: 94 k ☒ Data ok ☐ Junk
Comments: 244 244 922 evts ended run-MCC downtime $\Sigma Q = 337.870 \text{ mC}$ $Q = 6.295 \text{ mC}$							

Run Number: 15860	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: 11 PS2: -1 PS3: -1 PS4: 6 PS5: 0 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 02:03 Stop time (RC GUI): 02:25	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 430 k $e-\pi n$ evts: 2714	SHMS prescale pretrig: 564 k $\Sigma e-\pi n$ evts: 26727	COIN pretrig: 566 k ☒ Data ok ☐ Junk
Comments: dipole SHMS interlock-stop beam. $\Sigma Q = 378.255 \text{ mC}$ $Q = 40.385 \text{ mC}$							

Run Number: 15861	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: 11 PS2: -1 PS3: -1 PS4: 6 PS5: 0 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 02:50 Stop time (RC GUI): 03:30	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 858 k $e-\pi n$ evts: 5736	SHMS prescale pretrig: 1085 k $\Sigma e-\pi n$ evts: 32463	COIN pretrig: 1098 k ☒ Data ok ☐ Junk
Comments: 3004470 evts $\Sigma Q = 458.807 \text{ mC}$ $Q = 80.352 \text{ mC}$							

Run Number: 15862	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: 11 PS2: -1 PS3: -1 PS4: 6 PS5: 0 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 03:31 Stop time (RC GUI): 04:41	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 886 k $e-\pi n$ evts: 5977	SHMS prescale pretrig: 1110 k $\Sigma e-\pi n$ evts: 38440	COIN pretrig: 1038 k ☒ Data ok ☐ Junk
Comments: 3005715 evts $\Sigma Q = 541.479 \text{ mC}$ $Q = 82.672 \text{ mC}$							

Run Number: 15863	☐ 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
Comments: Junk very short CODA errors							

Run Number: 15864	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: 11 PS2: -1 PS3: -1 PS4: 6 PS5: 0 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 04:47 Stop time (RC GUI): 05:16	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 444 k $e-\pi n$ evts: 2942	SHMS prescale pretrig: 561 k $\Sigma e-\pi n$ evts: 41382	COIN pretrig: 562 k ☒ Data ok ☐ Junk
Comments: 1546834 evts $\Sigma Q = 583.116 \text{ mC}$ $Q = 41.637 \text{ mC}$							

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

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Date: 22/08/02
yy mm dd

Initials: KAA

Use a separate sheet for each configuration.

Configuration Name:

$Q^2 = 3.85$, $W = 3.07$ High- E
 $X = 0.31$ SHMS Center

E_{beam} : 10.541 GeV

I_{beam} : 65 μA

Purpose:

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

Raster: ☒ On ☐ Off
Size: 2x2

Beam position and angle on target:

3H07A	X	Y
	<u>-0.116</u> mm	<u>-0.28</u> mm
Nomin:		
3H07C	X	Y
	<u>-0.73</u> mm	<u>-0.49</u> mm
Nomin:		

HMS

SHMS

Q1	I-SET (from PSU) <u>513,8360</u> A	I-SET (from PSU) <u>2206,7000</u> A	HB
	B-HALL <u>0,67760</u> T	B-HALL <u>-13,952</u> kG	
Q2	I-SET (from PSU) <u>408,5740</u> A	I-SET (from PSU) <u>1376,5800</u> A	Q1
	B-HALL <u>-0,78916</u> T	B-HALL <u>9,794</u> kG	
Q3	I-SET (from PSU) <u>198,6790</u> A	I-SET (from PSU) <u>2305,8300</u> A	Q2
	B-HALL <u>0,70099</u> T	B-HALL <u>-21,733</u> kG	
D	I-READ <u>1208,51</u> A	I-SET (from PSU) <u>1517,2200</u> A	Q3
	B-NMR <u>1,079720</u> T	B-HALL <u>-14,623</u> kG	
If momentum increased:		I-SET (from PSU)	D
☐ HMS cycled?		<u>2086,0200</u> A	
☒ SHMS cycled?		<u>15,110</u> kG	

Run Number:

15865

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

PS1: 11
PS2: -1
PS3: -1
PS4: 6
PS5: 0
PS6: -1
Mode10: cer / fadc

Start time (RC GUI):

05:38

Stop time (RC GUI):

06:38

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

HMS prescale 1236 k
pretrig: _____
 $e-\pi n$ evts: 7233
8285

SHMS prescale 575 k
pretrig: _____
 $\Sigma e-\pi n$ evts: 9233
8285

COIN pretrig: 820 k
☒ Data ok
☐ Junk

Comments:

2606427 evts

$\Sigma Q = 116.507 \text{ mC}$

$Q = 116.507 \text{ mC}$

Run Number:

15866

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

PS1: 11
PS2: -1
PS3: -1
PS4: 6
PS5: 0
PS6: -1
Mode10: cer / fadc

Start time (RC GUI):

06:39

Stop time (RC GUI):

06:57

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

HMS prescale 474 k
pretrig: _____
 $e-\pi n$ evts: 3444

SHMS prescale 235 k
pretrig: _____
 $\Sigma e-\pi n$ evts: 12677

COIN pretrig: 324 k
☒ Data ok
☐ Junk

Comments:

1023345 evts

STOPPED run SHMS dipole interlock

$Q = 44.720 \text{ mC}$

$\Sigma Q = 161.227 \text{ mC}$

Run Number:

15867

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

PS1: 11
PS2: -1
PS3: -1
PS4: 6
PS5: 0
PS6: -1
Mode10: cer / fadc

Start time (RC GUI):

07:33

Stop time (RC GUI):

08:01

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

HMS prescale 600 k
pretrig: _____
 $e-\pi n$ evts: 4213

SHMS prescale 301 k
pretrig: _____
 $\Sigma e-\pi n$ evts: 16890

COIN pretrig: 490 k
☒ Data ok
☐ Junk

Comments:

1375417 evts

Stopped early b/c another interlock

$Q = 56.798 \text{ mC}$

$\Sigma Q = 218.025 \text{ mC}$

Run Number:

15868

- ☐ 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):

10:13

Stop time (RC GUI):

11:13

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

HMS prescale 126 k
pretrig: _____
 $e-\pi n$ evts: 7048

SHMS prescale 118 k
pretrig: _____
 $\Sigma e-\pi n$ evts: 23938

COIN pretrig: 847 k
☒ Data ok
☐ Junk

Comments:

1090196

$Q = 93.772 \text{ mC}$
 $\Sigma Q = 211.797 \text{ mC}$

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

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

Date: 22 / 08 / 02
yy mm dd

Initials: BB

Continuation of Configuration:

$Q^2 = 3.85$ $W = 3.07$ $x = 0.31$

high ϵ , SHMS Center

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

Run Number: 15869	☐ 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): 11:14 Stop time (RC GUI): 11:49	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 138 k $e-\pi n$ evts: 7607	SHMS prescale pretrig: 136 k $\Sigma e-\pi n$ evts: 31545	COIN pretrig: 990 k ☒ Data ok ☐ Junk
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Comments:

1259493

stopped for hall access (HMS problems)

$Q = 102.332$ mC

TO hit moving up to 75 & down to 50

$\Sigma Q = 414.129$ mC

Run Number: 15870	☐ 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): 13:27 Stop time (RC GUI): 13:55	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 97 k $e-\pi n$ evts: 5457	SHMS prescale pretrig: 92 k $\Sigma e-\pi n$ evts: 37002	COIN pretrig: 696 k ☒ Data ok ☐ Junk
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Comments:

stopped early for fadc before BCM calib.

$Q = 71.989$ mC

$\Sigma Q = 486.118$ mC

Run Number: 15871	☐ 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): 13:56 Stop time (RC GUI): 14:01	☒ 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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Comments:

fadc model 10

Run Number: 15872	☐ 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): 14:03 Stop time (RC GUI): 15:14	☒ 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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Comments:

v582

BCM Calibration

full replay done for scalars

Run Number: 15873	☐ 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): 15:15 Stop time (RC GUI): 16:18	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 218 k $e-\pi n$ evts: 12254	SHMS prescale pretrig: 206 k $\Sigma e-\pi n$ evts: 49256	COIN pretrig: 1559 k ☒ Data ok ☐ Junk
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Comments:

$\Sigma Q = 648.268$

$Q = 162.151$

Run Number: 15874	☐ 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): 16:20 Stop time (RC GUI): 17:31	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 237 k $e-\pi n$ evts: 13019	SHMS prescale pretrig: 222 k $\Sigma e-\pi n$ evts: 62275	COIN pretrig: 1604 k ☒ Data ok ☐ Junk
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Comments:

$\Sigma Q = 823.578$

$Q = 175.309$

p(e,e'π)n Run Sheet

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

Date: 22 / 08 / 02
yy mm dd

Initials: H.M.

Continuation of Configuration:

$$Q^2 = 3.85 \text{ } W = 3.07$$

X = 0.32, high E, SEMS center

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

Run Number: 15875	☐ 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): 17:40 Stop time (RC GUI): 17:43	☐ 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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FADC₁₀ run

Run Number: 15876	☐ 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): 17:45 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:

15877

Seems!

Seems

Run Number: 15879	☐ 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): 17:58 Stop time (RC GUI): 18:42	☐ Settings Verified? ☐ HV OK? ☐ 50k OK?	HMS prescale pretrig: 139 k e-πn evts: 384	SHMS prescale pretrig: 184 k Σ e-πn evts: _____	COIN pretrig: 43 k ☐ Data ok ☐ Junk
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Comments:

$$Q = 75.148$$

$$75.148$$

Run Number: 15880	☒ 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): 18:58 Stop time (RC GUI): 18:58	☐ 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:

FADC₁₀ Run

Run Number: 15881	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: 12 PS2: -1 PS3: -1 PS4: 8 PS5: 0 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 19:00 Stop time (RC GUI): 20:00	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 216 k e-πn evts: 10313	SHMS prescale pretrig: 219 k Σ e-πn evts: 10313	COIN pretrig: 491 k ☒ Data ok ☐ Junk
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Comments:

$$Q = 164.593$$

Run Number: 15882	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: 12 PS2: -1 PS3: -1 PS4: 8 PS5: 0 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 20:14 Stop time (RC GUI): 21:15	☐ Settings Verified? ☐ HV OK? ☒ 50k OK?	HMS prescale pretrig: 119 k e-πn evts: 5671	SHMS prescale pretrig: 119 k Σ e-πn evts: 15984	COIN pretrig: 277 k ☒ Data ok ☐ Junk
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Comments:

$$\Sigma Q = 254.625$$

$$Q = 90.032$$

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

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

Date: 22/08/02-03 Initials: H.M.
yy mm dd

Continuation of Configuration:

$$Q^2 = 3.85, W = 3.07, X = 0.31$$

high ϵ , SHMS center

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

Run Number: <u>15883</u>	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: <u>12</u> PS2: <u>-1</u> PS3: <u>8</u> PS4: <u>8</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): <u>21:58</u> Stop time (RC GUI): <u>23:02</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale <u>253</u> k pretrig: e- π n evts: <u>12198</u>	SHMS prescale <u>256</u> k pretrig: Σ e- π n evts: <u>28182</u>	COIN <u>563</u> k pretrig: ☒ Data ok ☐ Junk
$\Sigma Q = 447.50$							
$Q = 192.876$							

Run Number: <u>15884</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>8</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): <u>08:04</u> Stop time (RC GUI): <u>09:04</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale <u>214</u> k pretrig: e- π n evts: <u>10634</u>	SHMS prescale <u>215</u> k pretrig: Σ e- π n evts: <u>38816</u>	COIN <u>466</u> k pretrig: ☒ Data ok ☐ Junk
$Q = 163.652$ mC $\Sigma Q = 611.53$ mC							

Run Number: <u>15885</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>8</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): <u>09:04</u> Stop time (RC GUI): <u>10:11</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale <u>280</u> k pretrig: e- π n evts: <u>13618</u>	SHMS prescale <u>282</u> k pretrig: Σ e- π n evts: <u>52434</u>	COIN <u>609</u> k pretrig: ☒ Data ok ☐ Junk
let run a bit long to ensure enough data before changing angles.							
$Q = 214.214$ mC $\Sigma Q = 825.367$ 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 _____ k pretrig: e- π n evts:	SHMS prescale _____ k pretrig: Σ e- π n evts:	COIN _____ k pretrig: ☐ Data ok ☐ Junk
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- π n evts:	SHMS prescale _____ k pretrig: Σ e- π n evts:	COIN _____ k pretrig: ☐ Data ok ☐ Junk
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- π n evts:	SHMS prescale _____ k pretrig: Σ e- π n evts:	COIN _____ k pretrig: ☐ Data ok ☐ Junk
Comments:							

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

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

Date: 22/08/03
yy mm dd

Initials: BB

Use a separate sheet for each configuration.

Configuration Name:

$Q^2=3.85$ $W=3.07$ $x=0.31$
high ϵ , SHMS left

E_{beam} : 10.542 GeV

I_{beam} : ~70 μA

Purpose:

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

Raster: ☒ On ☐ Off
Size: 2x2

Beam position and angle on target:

3H07A	X	Y
<u>-0.08</u>	mm	<u>-0.30</u> mm
Nomin:		Nomin:
3H07C	X	Y
<u>-0.70</u>	mm	<u>-0.50</u> mm
Nomin:		Nomin:

HMS

SHMS

Q1	I-SET (from PSU) <u>2220</u> 513.86 A B-HALL <u>0.68</u> T	I-SET (from PSU) <u>2203.8</u> A B-HALL <u>-13,951</u> kg	HB
Q2	I-SET (from PSU) <u>408.58</u> A B-HALL <u>-0.788</u> T	I-SET (from PSU) <u>1377.0</u> A B-HALL <u>9.794</u> kg	Q1
Q3	I-SET (from PSU) <u>198.78</u> A B-HALL <u>0.39</u> T	I-SET (from PSU) <u>2304.7</u> A B-HALL <u>-27,733</u> kg	Q2
D	I-READ <u>1209.54</u> A B-NMR <u>1.07</u> T	I-SET (from PSU) <u>1518.3</u> A B-HALL <u>0.399</u> kg	Q3
	If momentum increased: ☐ HMS cycled? ☐ SHMS cycled?	I-SET (from PSU) <u>2084.8</u> A B-NMR <u>15,103</u> kg	D

Run Number:

15886

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

PS1: 11
PS2: -1
PS3: -1
PS4: 8
PS5: 0
PS6: 0
Mode10: cer / fadc

Start time (RC GUI):

10:26

Stop time (RC GUI):

11:26

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

HMS prescale
pretrig: 232 k

$e-\pi n$ evts:
7332

SHMS prescale
pretrig: 171 k

$\Sigma e-\pi n$ evts:
7332

COIN pretrig: 252 k

- ☒ Data ok
☐ Junk

Comments:

654

$Q=177.285$ mC
 $\Sigma Q=177.285$ mC

Run Number:

15887

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

PS1: 11
PS2: -1
PS3: -1
PS4: 8
PS5: 0
PS6: -1
Mode10: cer / fadc

Start time (RC GUI):

11:26

Stop time (RC GUI):

11:42

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

HMS prescale
pretrig: 28 k

$e-\pi n$ evts:
942

SHMS prescale
pretrig: 19 k

$\Sigma e-\pi n$ evts:
8274

COIN pretrig: 28 k

- ☒ Data ok
☐ Junk

Comments:

Stopped early - RF issues, can't get above 40 μA $\rightarrow$ changing PS values.

$Q=21.100$ mC
 $\Sigma Q=198.385$ mC

Run Number:

15888

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

PS1: 10
PS2: -1
PS3: -1
PS4: 7
PS5: 0
PS6: 0
Mode10: cer / fadc

Start time (RC GUI):

11:45

Stop time (RC GUI):

12:27

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

HMS prescale
pretrig: 163 k

$e-\pi n$ evts:
2584

SHMS prescale
pretrig: 117 k

$\Sigma e-\pi n$ evts:
10858

COIN pretrig: 93 k

- ☒ Data ok
☐ Junk

Comments:

back to 70 μA ... changing PS values

$Q=62.311$ mC
 $\Sigma Q=260.696$ mC

Run Number:

15889

- ☐ 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):

12:28

Stop time (RC GUI):

12:28

- ☐ 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 - forgot to change PS... stupid

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

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

Date: 22 / 08 / 03
yy mm dd

Initials: BB

Continuation of Configuration:

$D^2=3.85$ $W=3.07$ $x=0.31$
high ϵ , SHMS left

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

Run Number: 15890	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: 10 PS2: -1 PS3: -1 PS4: 8 PS5: 0 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 12:30 Stop time (RC GUI): 13:30	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 181 k $e-\pi n$ evts: 5700	SHMS prescale pretrig: 265 k $\Sigma e-\pi n$ evts: 16558	COIN pretrig: 202 k ☒ Data ok ☐ Junk
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$Q=138.046$ mC
 $\Sigma Q=398.742$ mC

Run Number: 15891	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: 10 PS2: -1 PS3: -1 PS4: 8 PS5: 0 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 13:30 Stop time (RC GUI): 14:30	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 151 k $e-\pi n$ evts: 4922	SHMS prescale pretrig: 223 k $\Sigma e-\pi n$ evts: 21480	COIN pretrig: 173 k ☒ Data ok ☐ Junk
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$Q=117.013$ mC
 $\Sigma Q=515.755$ mC

Run Number: 15892	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: 10 PS2: -1 PS3: -1 PS4: 8 PS5: 0 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 14:30 Stop time (RC GUI): 14:50	☒ 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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beam trip whole run... Junk

Run Number: 15893	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: 10 PS2: -1 PS3: -1 PS4: 8 PS5: 0 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 16:52 Stop time (RC GUI): 17:50	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 100 k $e-\pi n$ evts: 3221	SHMS prescale pretrig: 144 k $\Sigma e-\pi n$ evts: 24701	COIN pretrig: 121 k ☒ Data ok ☐ Junk
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Stopped to change PSS as the rate was above 100 for 70 nA. Beam was on and off (off for quite a while)

$Q=75.788$ mC
 $\Sigma Q=591.543$ mC

Run Number: 15894	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: 11 PS2: -1 PS3: -1 PS4: 8 PS5: 0 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 17:51 Stop time (RC GUI): 18:35	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 171 k $e-\pi n$ evts: 5449	SHMS prescale pretrig: 125 k $\Sigma e-\pi n$ evts: 30150	COIN pretrig: 183 k ☒ Data ok ☐ Junk
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$Q=130.510$ mC
 $\Sigma Q=722.053$ mC

Run Number: 15895	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: 11 PS2: -1 PS3: -1 PS4: 8 PS5: 0 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 18:36 Stop time (RC GUI): 18:39	☒ 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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fadc mode10

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

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

Date: 22/08/03
yy mm dd

Initials: Iu.S.

Continuation of Configuration:

$Q^2=3.85$, $W=3.07$, $x=0.31$
high ε , SHMS left

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

Run Number: 15896	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: <u>11</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): 18:40 Stop time (RC GUI): 19:24	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 199 k $e-\pi n$ evts: 6317	SHMS prescale pretrig: 146 k $\Sigma e-\pi n$ evts: 36467	COIN pretrig: 211 k ☒ Data ok ☐ Junk
Comments: 70 μA							
$Q=151.536\text{ mC}$ $\Sigma Q=873.589\text{ mC}$							

Run Number: 15897	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: <u>11</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): 19:25 Stop time (RC GUI): 20:06	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 187 k $e-\pi n$ evts: 5912	SHMS prescale pretrig: 138 k $\Sigma e-\pi n$ evts: 42379	COIN pretrig: 200 k ☒ Data ok ☐ Junk
Comments: 70 μA							
$Q=142.505\text{ mC}$ $\Sigma Q=1016.094\text{ mC}$							

Run Number: 15898	☐ 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 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: 15899	☐ LH2 10cm ☐ LD2 10cm ☒ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: <u>8</u> PS2: <u>-1</u> PS3: <u>-1</u> PS4: <u>8</u> PS5: <u>-1</u> PS6: <u>-1</u> Mode10: <u>cer</u> / fadc	Start time (RC GUI): 20:14 Stop time (RC GUI): 21:12	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 227 k $e-\pi n$ evts: 345	SHMS prescale pretrig: 246 k $\Sigma e-\pi n$ evts: 	COIN pretrig: 53 k ☒ Data ok ☐ Junk
Comments: dummy, 40 μA							
$Q=122.555\text{ mC}$ dummy							

Run Number: 15900	☐ 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>9</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: <u>cer</u> / fadc	Start time (RC GUI): 21:20 Stop time (RC GUI): 21:52	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 132 k $e-\pi n$ evts: 4998	SHMS prescale pretrig: 93 k $\Sigma e-\pi n$ evts: 	COIN pretrig: 382 k ☒ Data ok ☐ Junk
Comments: 70 μA							
$Q=97.311\text{ mC}$							

Run Number: 15901	☐ 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>9</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: <u>cer</u> / fadc	Start time (RC GUI): 21:52 Stop time (RC GUI): 22:19	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 110 k $e-\pi n$ evts: 4164	SHMS prescale pretrig: 78 k $\Sigma e-\pi n$ evts: 9162	COIN pretrig: 324 k ☒ Data ok ☐ Junk
Comments: 70 μA							
$Q=81.731\text{ mC}$ $\Sigma Q=179.902\text{ mC}$							

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

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

Date: 22/08/03
yy mm dd

Initials: Iu.S.

Continuation of Configuration:

$Q^2=3.85, W=3.07, x=0.31$
high ε , SHMS left

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

Run Number: 15902	☐ 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>9</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): 22:20:31 Stop time (RC GUI): 22:23:18	☐ Settings Verified? ☐ HV OK? ☐ 50k OK?	HMS prescale pretrig: k e- π n evts:	SHMS prescale pretrig: k Σ e- π n evts:	COIN pretrig: k ☒ Data ok ☐ Junk
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Comments:

for dc mode 10

Run Number: 15903	☐ 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>9</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): 22:24 Stop time (RC GUI): 22:54	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 134 k e- π n evts: 5089	SHMS prescale pretrig: 95 k Σ e- π n evts: 14251	COIN pretrig: 395 k ☒ Data ok ☐ Junk
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Comments:

70nA

$Q = 99.414 \text{ mC}$
 $\Sigma Q = 278.456 \text{ mC}$

Run Number: 15904	☐ 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>9</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): 22:54 Stop time (RC GUI): 23:22	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 123 k e- π n evts: 4576	SHMS prescale pretrig: 87 k Σ e- π n evts: 18827	COIN pretrig: 360 k ☒ Data ok ☐ Junk
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Comments:

70nA

$Q = 90.995 \text{ mC}$
 $\Sigma Q = 369.451 \text{ mC}$

Run Number: 15905	☐ 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>9</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): 23:23 Stop time (RC GUI): 23:47	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 87 k e- π n evts: 3218	SHMS prescale pretrig: 62 k Σ e- π n evts: 22045	COIN pretrig: 261 k ☒ Data ok ☐ Junk
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Comments:

70nA

$Q = 64.424$
 $\Sigma Q = 433.875$

Run Number: 15906	☐ 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>9</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): 23:48 Stop time (RC GUI): 00:18:38	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 105 k e- π n evts: 3926	SHMS prescale pretrig: 74 k Σ e- π n evts: 25971	COIN pretrig: 298 k ☒ Data ok ☐ Junk
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Comments:

70nA

$Q = 77.261$
 $\Sigma Q = 511.136$

Run Number: 15907	☐ 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>9</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): 00:19:17 Stop time (RC GUI): 00:50:06	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 140 k e- π n evts: 5217	SHMS prescale pretrig: 99 k Σ e- π n evts: 31188	COIN pretrig: 417 k ☒ Data ok ☐ Junk
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Comments:

70nA

$Q = 103.351$
 $\Sigma Q = 614.487$

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

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

Date: 22/08/04
yy mm dd

Initials: EW

Continuation of Configuration:

$Q^2 = 3.85$ $W = 3.07$, $x = 0.31$
high E , SHMS left

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

Run Number: <u>15908</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>9</u> PS5: <u>9</u> PS6: <u>9</u> Mode10: cer / fadc	Start time (RC GUI): <u>00:50:42</u> Stop time (RC GUI): <u>01:20:34</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: <u>129</u> k $e-\pi n$ evts: <u>4802</u>	SHMS prescale pretrig: <u>91</u> k $\Sigma e-\pi n$ evts: <u>35990</u>	COIN pretrig: <u>369</u> k ☒ Data ok ☐ Junk
Comments: <u>70 m A</u>							

$Q = 44.145$
 $\Sigma Q = 709.232$

Run Number: <u>15909</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>0</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): <u>01:21:40</u> Stop time (RC GUI): <u>01:53:25</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: <u>136</u> k $e-\pi n$ evts: <u>5029</u>	SHMS prescale pretrig: <u>96</u> k $\Sigma e-\pi n$ evts: <u>41019</u>	COIN pretrig: <u>401</u> k ☒ Data ok ☐ Junk
Comments: <u>70 m A</u>							

$Q = 100.064$
 $\Sigma Q = 809.296$

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
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 $e-\pi n$ evts: _____	SHMS prescale pretrig: _____ k $\Sigma e-\pi n$ evts: _____	COIN pretrig: _____ k ☐ Data ok ☐ Junk
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 $e-\pi n$ evts: _____	SHMS prescale pretrig: _____ k $\Sigma e-\pi n$ evts: _____	COIN pretrig: _____ k ☐ Data ok ☐ Junk
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 $e-\pi n$ evts: _____	SHMS prescale pretrig: _____ k $\Sigma e-\pi n$ evts: _____	COIN pretrig: _____ k ☐ Data ok ☐ Junk
Comments:							