

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

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

Date: 24/11/17
yy mm dd

Initials: *DB*

Use a separate sheet for each configuration.

Configuration Name: _____

Optics / calibration

E_{beam}: 5.964 GeV

I_{beam}: _____ μ A

HMS

p: +0.20
From GUI

θ (TV): 31.15
Nearest 0.005

SHMS

p: +0.20
From GUI

θ (TV): 8.00
Nearest 0.005

Collimator:

HMS: Large ☒
Sieve ☐

SHMS: Collim ☒
Sieve ☐

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
	mm	mm
Nomin:		Nomin:
3H07C	X	Y
	mm	mm
Nomin:		Nomin:

HMS

SHMS

Q1	I-SET (from PSU) B-HALL 260.499 A 0.34550 T	I-SET (from PSU) B-HALL 661.0280 A 4.227 KG	HB
Q2	I-SET (from PSU) B-HALL 207.0540 A -0.37854 T	I-SET (from PSU) B-HALL 419.9390 A -2.951 KG	Q1
Q3	I-SET (from PSU) B-HALL 100.6210 A 0.19823 T	I-SET (from PSU) B-HALL 705.3630 A 6.572 KG	Q2
D	I-READ B-NMR 611.40 A 0.5474670 T	I-SET (from PSU) B-HALL 464.1236 A 4.474 KG	Q3
	If momentum increased: ☒ HMS cycled? ☒ SHMS cycled?	I-SET (from PSU) B-NMR 638.1210 A -4.657 KG	D

Run Number:

13043

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

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:

Beam position unstable.

Run Number:

13044

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

PS1: -1
PS2: 0
PS3: -1
PS4: 0
PS5: -1
PS6: -1
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:

Beam position looks good

Run Number:

13045

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

PS1: 5
PS2: -1
PS3: -1
PS4: 0
PS5: -1
PS6: -1
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:

SHMS angle = 19.98 degrees

HMS/SHMS sieve in

Run Number:

13046

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

PS1: 2
PS2: -1
PS3: -1
PS4: 0
PS5: -1
PS6: -1
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:

HMS/SHMS sieve Run

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

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

Date: 21/11/17
yy mm dd

Initials: OK

Continuation of Configuration:

Optics / calibration

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

Run Number: 13047	☐ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☒ Optics <u>3</u> cm ☐ _____	PS1: <u>0</u> PS2: <u>-1</u> PS3: <u>-1</u> PS4: <u>-1</u> PS5: <u>-1</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): 21:26 Stop time (RC GUI): 22:10	☒ 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:

Sieve runs - beam off for 15 minutes @ end

Run Number: 13048	☐ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☒ Optics <u>3</u> cm ☐ _____	PS1: <u>0</u> PS2: <u>-1</u> PS3: <u>-1</u> PS4: <u>0</u> PS5: <u>-1</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): 23:40 Stop time (RC GUI): 0:17	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: k $e-\pi n$ evts:	SHMS prescale pretrig: k $\Sigma e-\pi n$ evts:	COIN pretrig: k ☐ Data ok ☐ Junk
-----------------------------	---	--	--	---	--	--	--

Comments:

Sieve run

Run Number: 13049	☐ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☒ Optics <u>10</u> cm ☐ _____	PS1: <u>0</u> PS2: <u>-1</u> PS3: <u>-1</u> PS4: <u>0</u> PS5: <u>-1</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): 00:24 Stop time (RC GUI): 1:03	☒ 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:

50 μ A, raster ON (Sieve in HMS & SHMS) carbon 0.501°

Run Number: 13050	☐ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☒ Optics <u>10</u> cm ☐ _____	PS1: <u>0</u> PS2: <u>-1</u> PS3: <u>-1</u> PS4: <u>0</u> PS5: <u>-1</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): 02:03 Stop time (RC GUI): 02:38	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: k $e-\pi n$ evts:	SHMS prescale pretrig: k $\Sigma e-\pi n$ evts:	COIN pretrig: k ☐ Data ok ☐ Junk
-----------------------------	--	--	---	---	--	--	--

Comments:

50 μ A, raster ON (Sieve in HMS & SHMS) carbon 0.501°

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:

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

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

Use a separate sheet for each configuration.

Date: 21/11/08
yy mm dd

Initials: NH

HMS

SHMS

Configuration Name:
Heep Coin #1

E_{beam}: 6.986 GeV **I_{beam}:** 70 μ A

HMS
p: +/- -3.400 **θ (TV):** 28.285
From GUI Nearest 0.005

SHMS
p: +/- 3.400 **θ (TV):** 28.285
From GUI Nearest 0.005

Collimator: HMS: Large ☒ Sieve ☐ SHMS: Collim ☒ Sieve ☐

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>-0.5</u> mm		<u>-0.0</u> mm
Nomin:		Nomin:
3H07C	X	Y
<u>-0.9</u> mm		<u>-0.3</u> mm
Nomin:		Nomin:

	HMS	SHMS	
Q1	I-SET (from PSU) <u>443.18</u> A B-HALL <u>0.5871</u> T	I-SET (from PSU) <u>1127.35</u> A B-HALL <u>-7.150</u> kG	HB
Q2	I-SET (from PSU) <u>352.23</u> A B-HALL <u>-0.67408</u> T	I-SET (from PSU) <u>713.8</u> A B-HALL <u>5.072</u> kG	Q1
Q3	I-SET (from PSU) <u>171.19</u> A B-HALL <u>0.34194</u> T	I-SET (from PSU) <u>1199.52</u> A B-HALL <u>-11.293</u> kG	Q2
D	I-READ <u>1041.66</u> A B-NMR <u>0.93081</u> T	I-SET (from PSU) <u>788.80</u> A B-HALL <u>-7.715</u> kG	Q3
	If momentum increased: ☒ HMS cycled? ☒ SHMS cycled?	I-SET (from PSU) <u>1084.88</u> A B-NMR <u>7.848</u> kG	D

Run Number: 13051

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

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

Start time (RC GUI): _____ **Settings Verified?** ☐ **HV OK?** ☐ **50k OK?** ☐

Stop time (RC GUI): _____

HMS prescale pretrig: _____ k **SHMS prescale pretrig:** _____ k **COIN pretrig:** _____ k

$e-\pi n$ evts: _____ **$\Sigma e-\pi n$ evts:** _____

☐ Data ok ☒ Junk

Comments: PS-set wrong & beam lost fade Mode 10

Run Number: 13052

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

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

Start time (RC GUI): 3:34:42 **Settings Verified?** ☒ **HV OK?** ☒ **50k OK?** ☐

Stop time (RC GUI): 3:56:44

HMS prescale pretrig: _____ k **SHMS prescale pretrig:** _____ k **COIN pretrig:** _____ k

$e-\pi n$ evts: _____ **$\Sigma e-\pi n$ evts:** _____

☐ Data ok ☒ Junk

Comments: didn't hit save when setting PS

Run Number: 13053

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

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

Start time (RC GUI): 03:59 **Settings Verified?** ☒ **HV OK?** ☒ **50k OK?** ☐

Stop time (RC GUI): 03:59

HMS prescale pretrig: _____ k **SHMS prescale pretrig:** _____ k **COIN pretrig:** _____ k

$e-\pi n$ evts: _____ **$\Sigma e-\pi n$ evts:** _____

☐ Data ok ☒ Junk

Comments: didn't hit save when setting PS and started pro comode10

Run Number: 13054

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

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

Start time (RC GUI): 04:00 **Settings Verified?** ☒ **HV OK?** ☒ **50k OK?** ☐

Stop time (RC GUI): 04:02

HMS prescale pretrig: 80 k **SHMS prescale pretrig:** 8 k **COIN pretrig:** 4 k

$e-\pi n$ evts: 75 **$\Sigma e-\pi n$ evts:** 824

☐ Data ok ☐ Junk

Comments: Beam down for 20s - extended run by 20s | Reply error corrected, date updated

p(e,e' π)n Run Sheet

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

Date: 21/11/08
yy mm dd

Initials: SAS

Continuation of Configuration:

Heap Coin #1

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

Run Number: <u>13055</u>	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: <u>6</u> PS2: <u>-1</u> PS3: <u>-1</u> PS4: <u>0</u> PS5: <u>-1</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): <u>04:03</u> Stop time (RC GUI): <u>04:33</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale <u>133</u> k SHMS prescale <u>124</u> k $e-\pi n$ evts: <u>3224</u> $\Sigma e-\pi n$ evts: <u>20451</u>	COIN pretrig: <u>49</u> k ☒ Data ok ☐ Junk
-----------------------------	---	--	---	---	---	---

Higher PSI than expected to achieve 100Hz singles SHMS. Replay error corrected

Run Number: <u>13056</u>	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: <u>6</u> PS2: <u>-1</u> PS3: <u>-1</u> PS4: <u>1</u> PS5: <u>-1</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): <u>04:36</u> Stop time (RC GUI): <u>05:16</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale <u>187</u> k SHMS prescale <u>175</u> k $e-\pi n$ evts: <u>31</u> $\Sigma e-\pi n$ evts: <u>377</u> <u>28554</u>	COIN pretrig: <u>68</u> k ☒ Data ok ☐ Junk
-----------------------------	---	--	---	---	---	---

Replay error (RF time cut poorly placed) corrected

Run Number: <u>13057</u>	☐ LH2 10cm ☐ LD2 10cm ☒ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: <u>6</u> PS2: <u>-1</u> PS3: <u>-1</u> PS4: <u>1</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): <u>05:24</u> Stop time (RC GUI): <u>05:35</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale <u>15</u> k SHMS prescale <u>18</u> k $e-\pi n$ evts: <u>613</u>	COIN pretrig: <u>7</u> k ☐ Data ok ☐ Junk
-----------------------------	---	---	---	---	---	---

Target to 10cm Dummy, 40 μ A

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

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

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

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

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

Date: 21/11/08
yy mm dd

Initials: MM

Use a separate sheet for each configuration.

Configuration Name:

Heep Coin #2

Purpose:

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

E_{beam}: 5.986 GeV

I_{beam}: 70 μ A

Raster: ☒ On ☐ Off
Size: 2x2

HMS

p: +/- -3.2710 θ (TV): 29.170
From GUI Nearest 0.005

SHMS

p: +/- 3.4930 θ (TV): 27.495
From GUI Nearest 0.005

Collimator:

HMS: Large Sieve ☒

SHMS: Collim Sieve ☒

Beam position and angle on target:

3H07A	X	Y
	mm	mm
Nomin:		Nomin:
3H07C	X	Y
	mm	mm
Nomin:		Nomin:

HMS

SHMS

Q1	I-SET (from PSU) 426.18 A B-HALL 0.56870 T	I-SET (from PSU) 1158.60 A B-HALL -7.333 kG	HB
Q2	I-SET (from PSU) 338.84 A B-HALL -0.64457 T	I-SET (from PSU) 733.32 A B-HALL 5.235 kG	Q1
Q3	I-SET (from PSU) 164.70 A B-HALL 0.32893 T	I-SET (from PSU) 1232.24 A B-HALL -11.618 kG	Q2
D	I-READ 1001.76 A B-NMR 0.89550 T	I-SET (from PSU) 810.40 A B-HALL -7.878 kG	Q3
	If momentum increased: ☐ HMS cycled? ☐ SHMS cycled?	I-SET (from PSU) 1114.52 A B-NMR 8.093 kG	D

Run Number:

13058

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

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

Start time (RC GUI):

06:03

Stop time (RC GUI):

06:33

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale
pretrig: 130 k

$e-\pi n$ evts:

27

SHMS prescale
pretrig: 135 k

$\Sigma e-\pi n$ evts:

COIN
pretrig: 46 k

☒ Data ok

☐ Junk

Comments:

Run Number:

13059

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

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

Start time (RC GUI):

06:34

Stop time (RC GUI):

06:37

☒ 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

Comments:

Bad Beam

Run Number:

13060

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

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

Start time (RC GUI):

06:41

Stop time (RC GUI):

06:43

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale
pretrig: 10 k

$e-\pi n$ evts:

1407

SHMS prescale
pretrig: 11 k

$\Sigma e-\pi n$ evts:

COIN
pretrig: 4 k

☒ Data ok

☐ Junk

Comments:

Run Number:

13061

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

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

Start time (RC GUI):

06:44

Stop time (RC GUI):

07:35

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale
pretrig: 177 k

$e-\pi n$ evts:

23897

SHMS prescale
pretrig: 181 k

$\Sigma e-\pi n$ evts:

COIN
pretrig: 67 k

☒ Data ok

☐ Junk

Comments:

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

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

Date: 21/11/08
yy mm dd

Initials: SAS

Continuation of Configuration:

Heep Coin #2

5.986 = E, 70 pA 40

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

Run Number: <u>13062</u>	☐ LH2 10cm ☐ LD2 10cm ☒ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: <u>6</u> PS2: <u>-1</u> PS3: <u>-1</u> PS4: <u>1</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: <u>cer / fadc</u>	Start time (RC GUI): <u>06:08:03</u> Stop time (RC GUI): <u>08:16</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: <u>17</u> k $e-\pi n$ evts: <u>0</u>	SHMS prescale pretrig: <u>20</u> k $\Sigma e-\pi n$ evts:	COIN pretrig: <u>8</u> 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: <u>cer / fadc</u>	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: <u>cer / fadc</u>	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: <u>cer / fadc</u>	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: <u>cer / fadc</u>	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: <u>cer / fadc</u>	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:							

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

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

Date: 2024/13/68
yy mm dd

Initials: AU

Use a separate sheet for each configuration.

Configuration Name: $Q^2=3.85$

$W=2.02$, $x=0.54$

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
	mm	mm
Nomin:		Nomin:
3H07C	X	Y
	mm	mm
Nomin:		Nomin:

HMS

SHMS

Q1	I-SET (from PSU) 290.43 A B-HALL T	I-SET (from PSU) 1158.40 A B-HALL kG	HB
Q2	I-SET (from PSU) 230.84 A B-HALL T	I-SET (from PSU) 733.32 A B-HALL kG	Q1
Q3	I-SET (from PSU) 112.15 A B-HALL T	I-SET (from PSU) 1232.24 A B-HALL kG	Q2
D	I-READ 681.66 A B-NMR T	I-SET (from PSU) 810.44 A B-HALL kG	Q3
	If momentum increased: ☒ HMS cycled? ☐ SHMS cycled?	I-SET (from PSU) 1114.44 A B-NMR kG	D

Run Number:

13063

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

PS1: 12
PS2: -1
PS3: -1
PS4: 5
PS5: 0
PS6: -1
Mode10: cer / fadc

Start time (RC GUI):

10:05

Stop time (RC GUI):

10:35

☒ Settings
Verified?

☒ HV OK?

☒ 50k OK?

HMS
prescale 109 k
pretrig:

$e-\pi n$ evts:

1235

SHMS
prescale 130 k
pretrig:

$\Sigma e-\pi n$ evts:

1235

COIN
pretrig: 52 k

☒ Data ok

☐ Junk

Comments:

Run Number:

13064

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

PS1: 12
PS2: -1
PS3: -1
PS4: 5
PS5: 0
PS6: -1
Mode10: cer / fadc

Start time (RC GUI):

10:36

Stop time (RC GUI):

11:06

☐ Settings
Verified?

☒ HV OK?

☒ 50k OK?

HMS
prescale 102 k
pretrig:

$e-\pi n$ evts:

1118

SHMS
prescale 121 k
pretrig:

$\Sigma e-\pi n$ evts:

2353

COIN
pretrig: 49 k

☒ Data ok

☐ Junk

Comments:

Run Number:

13065

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

PS1: 12
PS2: -1
PS3: -1
PS4: 5
PS5: 0
PS6: -1
Mode10: cer / fadc

Start time (RC GUI):

11:07

Stop time (RC GUI):

11:40

☐ Settings
Verified?

☒ HV OK?

☒ 50k OK?

HMS
prescale 102 k
pretrig:

$e-\pi n$ evts:

1190

SHMS
prescale 121 k
pretrig:

$\Sigma e-\pi n$ evts:

3543

COIN
pretrig: 51 k

☒ Data ok

☐ Junk

Comments:

Run Number:

13066

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

PS1: 12
PS2: -1
PS3: -1
PS4: 5
PS5: 0
PS6: -1
Mode10: cer / fadc

Start time (RC GUI):

11:40

Stop time (RC GUI):

12:19

☐ Settings
Verified?

☒ HV OK?

☒ 50k OK?

HMS
prescale 106 k
pretrig:

$e-\pi n$ evts:

1256

SHMS
prescale 125 k
pretrig:

$\Sigma e-\pi n$ evts:

4799

COIN
pretrig: 56 k

☒ Data ok

☐ Junk

Comments:

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

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

Date: 21/11/8
yy mm dd

Initials: RM

Use a separate sheet for each configuration.

Configuration Name: Q² = 3.85

W = 2.02 X = 0.54

Purpose:

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

Raster: ☒ On ☐ Off
Size: 2 x 2

Beam position and angle
on target:

3H07A	X	Y
	mm	mm
Nomin:		Nomin:
3H07C	X	Y
	mm	mm
Nomin:		Nomin:

HMS

SHMS

Q1	I-SET (from PSU) 290.43 A B-HALL 0.3846 T	I-SET (from PSU) 1158.40 A B-HALL -7.332 KG	HB
Q2	I-SET (from PSU) 230.84 A B-HALL -0.4286 T	I-SET (from PSU) 733.32 A B-HALL 5.235 KG	Q1
Q3	I-SET (from PSU) 112.16 A B-HALL 0.22204 T	I-SET (from PSU) 1232.24 A B-HALL -11.619 KG	Q2
D	I-READ 681.66 A B-NMR 0.61020 T	I-SET (from PSU) 810.44 A B-HALL -7.880 KG	Q3
	If momentum increased: ☐ HMS cycled? ☐ SHMS cycled?	I-SET (from PSU) 1114.52 A B-NMR 8.093 KG	D

Run Number:

13067

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

PS1: 12
PS2: -1
PS3: -1
PS4: 5
PS5: 0
PS6: -1
Mode10: cer / fadc

Start time (RC GUI):

12:20

Stop time (RC GUI):

12:51

☒ Settings
Verified?

☒ HV OK?

☒ 50k OK?

HMS
prescale 118 k
pretrig:

$e-\pi n$ evts:

1293

SHMS
prescale 140 k
pretrig:

$\Sigma e-\pi n$ evts:

6092

COIN
pretrig: 55 k

☒ Data ok

☐ Junk

Comments:

same running conditions as run 13066.

Run Number:

13068

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

PS1: 12
PS2: -1
PS3: -1
PS4: 5
PS5: 0
PS6: -1
Mode10: cer / fadc

Start time (RC GUI):

12:52

Stop time (RC GUI):

13:30

☐ Settings
Verified?

☐ HV OK?

☒ 50k OK?

HMS
prescale 152 k
pretrig:

$e-\pi n$ evts:

1687

SHMS
prescale 180 k
pretrig:

$\Sigma e-\pi n$ evts:

7779

COIN
pretrig: 69 k

☐ Data ok

☐ Junk

Comments:

Run Number:

13069

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

PS1: 12
PS2: -1
PS3: -1
PS4: 5
PS5: 0
PS6: -1
Mode10: cer / fadc

Start time (RC GUI):

13:31

Stop time (RC GUI):

13:35

☒ Settings
Verified?

☒ HV OK?

☐ 50k OK?

HMS
prescale ~~152~~ k
pretrig:

$e-\pi n$ evts:

~~1687~~

SHMS
prescale ~~180~~ k
pretrig:

$\Sigma e-\pi n$ evts:

~~7779~~

COIN
pretrig: ~~69~~ k

☐ Data ok

☐ Junk

Comments:

This is a fadc mode 10 run

Run Number:

13070

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

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

Start time (RC GUI):

13:43

Stop time (RC GUI):

14:30

☐ Settings
Verified?

☐ HV OK?

☐ 50k OK?

HMS
prescale 220 k
pretrig:

$e-\pi n$ evts:

1444

SHMS
prescale 153 k
pretrig:

$\Sigma e-\pi n$ evts:

9223

COIN
pretrig: 68 k

☒ Data ok

☐ Junk

Comments:

This is an HMS 3/4 trigger run.
Longish period of no beam, so we'll do another run.

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

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

Date: 21, 11, 8
yy mm dd

Initials: RM

Continuation of Configuration:

$W = 2.02$, $Q^2 = 3.85$

$x = 0.54$

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

Run Number: 13071	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: <u>12</u> PS2: <u>-1</u> PS3: <u>6</u> PS4: <u>-1</u> PS5: <u>-1</u> PS6: <u>0</u> Mode10: cer / fadc	Start time (RC GUI): <u>14:42</u> Stop time (RC GUI): <u>15:18.5</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale <u>2285</u> k SHMS prescale <u>160</u> k e- π n evts: <u>1470</u> Σ e- π n evts: <u>10693</u>	COIN pretrig: <u>61</u> k ☒ Data ok ☐ Junk
Comments: Back to trigger 5 and 4. Still using HMS 3/4 trigger						

Run Number: 13073	☐ 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>5</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): <u>15:17</u> Stop time (RC GUI): <u>16:00</u>	☐ Settings Verified? ☒ HV OK? ☐ 50k OK?	HMS prescale <u>144</u> k SHMS prescale <u>170</u> k e- π n evts: <u>1552</u> Σ e- π n evts: <u>12245</u>	COIN pretrig: <u>70</u> k ☒ Data ok ☐ Junk
Comments: *13072 is junk & very short. Now we return to trigger 5 and 4. "normal" production						

Run Number: 13074	☐ 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>5</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): <u>16:11</u> Stop time (RC GUI): <u>16:17</u>	☒ Settings Verified? ☒ HV OK? ☐ 50k OK?	HMS prescale _____ k SHMS prescale _____ k e- π n evts: _____ Σ e- π n evts: _____	COIN pretrig: _____ k ☐ Data ok ☒ Junk
Comments: low rate, will change prescale						

Run Number: 13075	☐ 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): <u>16:19</u> Stop time (RC GUI): <u>16:52</u>	☒ Settings Verified? ☒ HV OK? ☐ 50k OK?	HMS prescale <u>150</u> k SHMS prescale <u>174</u> k e- π n evts: <u>22</u> Σ e- π n evts: _____	COIN pretrig: <u>22</u> k ☒ Data ok ☐ Junk
Comments:						

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

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

Use a separate sheet for each configuration.

Date: 21 / 11 / 08
yy mm dd

Initials: P.S.

Configuration Name: $Q^2=385$

$W=2.02$

$X=0.54$

$E_{beam}=5965$ GeV

$I_{beam}=70$ μA

Purpose:

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

Raster: ☒ On ☐ Off
Size: 2×2 mm

Beam position and angle on target:

3H07A	X	Y
	mm	mm
Nomin:		Nomin:
3H07C	X	Y
	mm	mm
Nomin:		Nomin:

HMS

SHMS

Q1	I-SET (from PSU) 290.44 A B-HALL 0.38370 T	I-SET (from PSU) 1158.50 A B-HALL -7.332 kG	HB
Q2	I-SET (from PSU) 230.84 A B-HALL -0.42651 T	I-SET (from PSU) 733.24 A B-HALL 5.235 kG	Q1
Q3	I-SET (from PSU) 112.15 A B-HALL 0.22301 T	I-SET (from PSU) 1232.24 A B-HALL -11.619 kG	Q2
D	I-READ 681.63 A B-NMR 0.61020 T	I-SET (from PSU) 810.40 A B-HALL -7.879 kG	Q3
	If momentum increased: ☐ HMS cycled? ☐ SHMS cycled?		D
		I-SET (from PSU) 1114.52 A B-NMR 8.093 kG	

Run Number:

13076

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

PS1: 11
PS2: -1
PS3: -1
PS4: 5
PS5: 0
PS6: -1
Mode10: cer / fadc

Start time (RC GUI):

17:06

Stop time (RC GUI):

17:11

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale 5 k
pretrig:

$e-\pi n$ evts: 77

SHMS prescale 7 k
pretrig:

$\Sigma e-\pi n$ evts:

COIN pretrig: 4 k

☒ Data ok
☐ Junk

Comments:

FADCMODE 10

Run Number:

13077

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

PS1: 11
PS2: -1
PS3: -1
PS4: 5
PS5: 0
PS6: -1
Mode10: cer / fadc

Start time (RC GUI):

17:13

Stop time (RC GUI):

17:18

☒ Settings Verified?

☒ HV OK?

☐ 50k OK?

HMS prescale 28 k
pretrig:

$e-\pi n$ evts: 227

SHMS prescale 26 k
pretrig:

$\Sigma e-\pi n$ evts:

COIN pretrig: 7 k

☒ Data ok
☐ Junk

Comments:

FADCMODE 10

Run Number:

13078

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

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

Start time (RC GUI):

17:24

Stop time (RC GUI):

18:21

☒ Settings Verified?

☒ HV OK?

☐ 50k OK?

HMS prescale 437 k
pretrig:

$e-\pi n$ evts: 3084

SHMS prescale 332 k
pretrig:

$\Sigma e-\pi n$ evts: 3388

COIN pretrig: 92 k

☒ Data ok
☐ Junk

Comments:

C6RMODE10, switched PS6 $\leftrightarrow$ PS5 and PS3 $\leftrightarrow$ PS4

Run Number:

13079

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

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

Start time (RC GUI):

20:00

Stop time (RC GUI):

21:01

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale 437 k
pretrig:

$e-\pi n$ evts: 3199

SHMS prescale 327 k
pretrig:

$\Sigma e-\pi n$ evts: 6581

COIN pretrig: 92 k

☒ Data ok
☐ Junk

Comments:

p(e,e' π)n Run Sheet

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

Date: 21 / 11 / 08
yy mm dd

Initials: P.S.

Continuation of Configuration:

$$Q^2 = 3.85$$

$$W = 2.02$$

$$x = 0.54$$

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

Run Number: 13080	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: 11 PS2: -1 PS3: -1 PS4: 5 PS5: 0 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 21:02 Stop time (RC GUI): 21:22	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale 89 k SHMS prescale 114 k COIN pretrig: 31 k e- π n evts: 1056 Σ e- π n evts: 7643	☒ Data ok ☐ Junk
Comments:						

Run Number: 13081	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: 11 PS2: -1 PS3: -1 PS4: 5 PS5: 0 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 21:23 Stop time (RC GUI): 22:24	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale 263 k SHMS prescale 339 k COIN pretrig: 93 k e- π n evts: 3057 Σ e- π n evts: 10700	☒ Data ok ☐ Junk
Comments:						

Run Number: 13082	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: 11 PS2: -1 PS3: -1 PS4: 5 PS5: 0 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 22:24 Stop time (RC GUI): 22:56	☒ Settings Verified? ☒ HV OK? ☐ 50k OK?	HMS prescale 135 k SHMS prescale 174 k COIN pretrig: 49 k e- π n evts: 1639 Σ e- π n evts: 12339	☒ Data ok ☐ Junk
Comments:						

~~13083 junk 10cm prescale~~

Run Number: 13084	☐ LH2 10cm ☐ LD2 10cm ☒ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: 8 PS2: -1 PS3: -1 PS4: 2 PS5: 0 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 23:09 Stop time (RC GUI):	☐ Settings Verified? ☐ HV OK? ☐ 50k OK?	HMS prescale 149 k SHMS prescale 203 k COIN pretrig: 19 k e- π n evts: 31 Σ e- π n evts: 12370	☒ Data ok ☐ Junk
Comments: <i>13083 junk 10cm prescale</i>						

Run Number: 13085	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: 10 PS2: -1 PS3: -1 PS4: 5 PS5: 0 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 23:52 Stop time (RC GUI): 23:50	☐ Settings Verified? ☐ HV OK? ☐ 50k OK?	HMS prescale ____ k SHMS prescale ____ k COIN pretrig: ____ k e- π n evts: ____ Σ e- π n evts: ____	☐ Data ok ☐ Junk
Comments: fadc mode10 run - Wrongly written here see duplicate entry on next sheet (left)						

Run Number: 13086	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: 10 PS2: -1 PS3: 5 PS4: -1 PS5: -1 PS6: 0 Mode10: cer / fadc	Start time (RC GUI): 23:58 Stop time (RC GUI):	☐ Settings Verified? ☐ HV OK? ☐ 50k OK?	HMS prescale ____ k SHMS prescale ____ k COIN pretrig: ____ k e- π n evts: ____ Σ e- π n evts: ____	☐ Data ok ☐ Junk
Comments: hms 3/4 trigger - Wrongly written here see duplicate entry on next sheet (left)						

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

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

Date: 21/10/09
yy mm dd

Initials: NH

Use a separate sheet for each configuration.

Configuration Name:

$Q^2 = 3.85$, $W = 2.02$, $x = 0.54$
low ϵ , left

E_{beam}: 5.965 GeV

I_{beam}: 70 μ A

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>-0.5</u> mm		<u>0.0</u> mm
Nomin:		Nomin:
3H07C	X	Y
<u>-0.9</u> mm		<u>-0.3</u> mm
Nomin:		Nomin:

HMS

SHMS

Q1	I-SET (from PSU) <u>290.43</u> A B-HALL <u>0.384</u> T	I-SET (from PSU) <u>1158.55</u> A B-HALL <u>-2.335</u> kG	HB
Q2	I-SET (from PSU) <u>230.84</u> A B-HALL <u>-0.425</u> T	I-SET (from PSU) <u>733.32</u> A B-HALL <u>5.234</u> kG	Q1
Q3	I-SET (from PSU) <u>112.15</u> A B-HALL <u>0.222</u> T	I-SET (from PSU) <u>1232.20</u> A B-HALL <u>-11.621</u> kG	Q2
D	I-READ <u>681.66</u> A B-NMR <u>0.6102</u> T	I-SET (from PSU) <u>810.40</u> A B-HALL <u>-7.881</u> kG	Q3
	If momentum increased: ☐ HMS cycled? ☐ SHMS cycled?	<u>1114.52</u> A <u>8.087</u> kG	D

Run Number:

13085

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

PS1: 10
PS2: -1
PS3: -1
PS4: 5
PS5: 0
PS6: -1
Mode10: cer / fadc

Start time (RC GUI):

23:52

Stop time (RC GUI):

23:56

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

HMS prescale
pretrig: 16 k
 $e-\pi n$ evts:
188

SHMS prescale
pretrig: 22 k
 $\Sigma e-\pi n$ evts:
188

COIN pretrig: 5 k
☒ Data ok
☐ Junk

Comments:

fadc mode 10

Run Number:

13086

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

PS1: 10
PS2: -1
PS3: 5
PS4: -1
PS5: -1
PS6: 0
Mode10: cer / fadc

Start time (RC GUI):

23:58

Stop time (RC GUI):

0:58

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

HMS prescale
pretrig: 44 k
 $e-\pi n$ evts:
3039

SHMS prescale
pretrig: 339 k
 $\Sigma e-\pi n$ evts:
3227

COIN pretrig: 80 k
☒ Data ok
☐ Junk

Comments:

HMS $\frac{3}{4}$ Run

Run Number:

13087

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

PS1: 10
PS2: -1
PS3: -1
PS4: 5
PS5: 0
PS6: -1
Mode10: cer / fadc

Start time (RC GUI):

00:59

Stop time (RC GUI):

01:20

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

HMS prescale
pretrig: 100 k
 $e-\pi n$ evts:
1116

SHMS prescale
pretrig: 137 k
 $\Sigma e-\pi n$ evts:
4343

COIN pretrig: 29 k
☐ Data ok
☐ Junk

Comments:

Run Number:

13088

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

PS1: 10
PS2: -1
PS3: -1
PS4: 5
PS5: 0
PS6: -1
Mode10: cer / fadc

Start time (RC GUI):

01:21

Stop time (RC GUI):

02:21

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

HMS prescale
pretrig: 267 k
 $e-\pi n$ evts:
2918

SHMS prescale
pretrig: 363 k
 $\Sigma e-\pi n$ evts:
78261

COIN pretrig: 78 k
☐ Data ok
☐ Junk

Comments:

p(e,e' π)n Run Sheet

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

Date: 21/11/09
yy mm dd

Initials: JAS

Continuation of Configuration:

$Q^2 = 3.85$, $W = 2.02$, $x = 0.54$
low E, left

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

Run Number: 13089	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: 10 PS2: -1 PS3: -1 PS4: 5 PS5: 0 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 02:22 Stop time (RC GUI): 03:22	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 236 k $e-\pi n$ evts: 2562	SHMS prescale pretrig: 320 k $\Sigma e-\pi n$ evts: 9823	COIN pretrig: 74 k ☒ Data ok ☐ Junk
----------------------	--	--	---	---	---	---	--

Run Number: 13090	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: 10 PS2: -1 PS3: -1 PS4: 5 PS5: 0 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 03:22 Stop time (RC GUI): 3:54	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 130 k $e-\pi n$ evts: 1484	SHMS prescale pretrig: 176 k $\Sigma e-\pi n$ evts: 11307	COIN pretrig: 39 k ☒ Data ok ☐ Junk
----------------------	--	--	--	---	---	--	--

Run Number: 13091	☐ LH2 10cm ☐ LD2 10cm ☒ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: 10 PS2: -1 PS3: -1 PS4: 5 PS5: 0 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 04:08 Stop time (RC GUI): 04:33	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 21 k $e-\pi n$ evts: 32	SHMS prescale pretrig: 23 k $\Sigma e-\pi n$ evts:	COIN pretrig: 16 k ☐ Data ok ☐ Junk
----------------------	--	--	---	---	--	---	---

Did not change prescales, evt rate low. Added +5 min.

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
-------------	---	--	---	--	--	--	--

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
-------------	---	--	---	--	--	--	--

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
-------------	---	--	---	--	--	--	--

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

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

Use a separate sheet for each configuration.

Date: 21/11/09
yy mm dd

Initials: NH

Configuration Name: _____

Heep Singles
Setting #1

E_{beam}: 5.965 GeV

I_{beam}: 30 μ A

HMS

p: +05.5120 θ (TV): 12.400
From GUI Nearest 0.005

SHMS

p: +05.5120 θ (TV): 12.400 9.430
From GUI Nearest 0.005

Collimator: _____

HMS: Large Sieve ☒

SHMS: Collim Sieve ☒

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
-0.5 mm	0.0 mm	
Nomin:		
3H07C	X	Y
-0.9 mm	-0.5 mm	
Nomin:		

HMS

SHMS

Q1	I-SET (from PSU) 677.86 A B-HALL 0.90140 T	I-SET (from PSU) 1846.51 A B-HALL 11.73 kg	HB
Q2	I-SET (from PSU) 540.35 A B-HALL -1.055 T	I-SET (from PSU) 1157.35 A B-HALL -8.16 kg	Q1
Q3	I-SET (from PSU) 262.11 A B-HALL 0.528 T	I-SET (from PSU) 1943.98 A B-HALL 18.23 kg	Q2
D	I-READ 1623.09 A B-NMR 1.42556 T	I-SET (from PSU) 1279.12 A B-HALL 12.37 kg	Q3
	If momentum increased: ☒ HMS cycled? ☒ SHMS cycled?	I-SET (from PSU) 1758.66 A B-NMR 12.844 kg	D

Run Number: _____

13092

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

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

Start time (RC GUI): _____

08:30

Stop time (RC GUI): _____

08:47

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale 640 k
pretrig: _____

$e-\pi n$ evts: _____

SHMS prescale 642 k
pretrig: _____

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

COIN pretrig: _____ k

☒ Data ok

☐ Junk

Comments: _____

Run Number: _____

13093

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

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

Start time (RC GUI): _____

08:56

Stop time (RC GUI): _____

09:04

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale 97 k
pretrig: _____

$e-\pi n$ evts: _____

SHMS prescale 111 k
pretrig: _____

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

COIN pretrig: _____ k

☒ Data ok

☐ Junk

Comments: _____

Run Number: _____

13094

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

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

Start time (RC GUI): _____

09:23

Stop time (RC GUI): _____

09:32

☒ 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: _____

Run Number: _____

13095

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

PS1: -1
PS2: 10
PS3: -1
PS4: 4
PS5: -1
PS6: -1
Mode10: cer / fadc

Start time (RC GUI): _____

09:39

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

Comments: _____

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

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

Use a separate sheet for each configuration.

Date: 4 / 11 / 9
yy mm dd

Initials: SJ

Configuration Name: _____

Heep Sindes

Setting 2

E_{beam} : 5.965 GeV

I_{beam} : 12 μA

Purpose:

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

Raster: ☒ On ☐ Off

Size: _____

Beam position and angle on target:

3H07A	X	Y
-0.5 mm		0 mm
Nomin:		Nomin:
3H07C	X	Y
-0.9 mm		-0.3 mm
Nomin:		Nomin:

HMS

SHMS

Q1	I-SET (from PSU) 677.86 A B-HALL 0.89930 T	I-SET (from PSU) 1846 A B-HALL 11.732 kG	HB
Q2	I-SET (from PSU) 540.35 A B-HALL -1.05338 T	I-SET (from PSU) 1157.12 A B-HALL -8.169 kG	Q1
Q3	I-SET (from PSU) 260.10 A B-HALL 0.52795 T	I-SET (from PSU) 1943.48 A B-HALL 18.235 kG	Q2
D	I-READ 1623.09 A B-NMR 1.42556 T	I-SET (from PSU) 1276.76 A B-HALL 12.376 kG	Q3
	If momentum increased: ☐ HMS cycled? ☐ SHMS cycled?	I-SET (from PSU) 1758.40 A B-NMR -12.844 kG	D

Run Number:

13094

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

PS1: -1
PS2: 10
PS3: 5
PS4: 5
PS5: -1
PS6: -1
Mode10: cer / fadc

Start time (RC GUI):

09:23

Stop time (RC GUI):

09:32

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

HMS prescale
pretrig: 67 k

$e-\pi n$ evts:

SHMS prescale
pretrig: 123 k

$\Sigma e-\pi n$ evts:

COIN pretrig: k

☒ Data ok

☐ Junk

Comments:

Run Number:

13095

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

PS1: -1
PS2: 10
PS3: -1
PS4: 4
PS5: -1
PS6: -1
Mode10: cer / fadc

Start time (RC GUI):

09:39

Stop time (RC GUI):

10:05

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

HMS prescale
pretrig: 631 k

$e-\pi n$ evts:

SHMS prescale
pretrig: 548 k

$\Sigma e-\pi n$ evts:

COIN pretrig: k

☒ Data ok

☐ Junk

Comments:

log 3939317

Run Number:

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

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 _____
☐ _____

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:

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

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

Use a separate sheet for each configuration.

Date: 21/11/9
yy mm dd

Initials: SJ

Configuration Name: _____

Heep Singles

Setting 3

E_{beam}: 5.95 GeV

I_{beam}: 8 μ A

Purpose:

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

Raster: ☒ On ☐ Off
Size: _____

HMS

SHMS

Q1	I-SET (from PSU) 677.86 B-HALL	A	I-SET (from PSU) 1845.9 B-HALL	A	HB
	0.90170 T		11.732 kG		
Q2	I-SET (from PSU) 540.36 B-HALL	A	I-SET (from PSU) 1157.16 B-HALL	A	Q1
	-1.05328 T		-8.169 kG		
Q3	I-SET (from PSU) 262.10 B-HALL	A	I-SET (from PSU) 1943.8 B-HALL	A	Q2
	0.53242 T		18.232 kG		
D	I-READ 1623.09 B-NMR	A	I-SET (from PSU) 1278.83 B-HALL	A	Q3
	1.42554 T		12.375 kG		
If momentum increased:				I-SET (from PSU) 1758.44 B-NMR	D
☐ HMS cycled? ☐ SHMS cycled?				-12.833 kG	

Beam position and angle on target:

3H07A	X	Y
-0.49 mm		0.01 mm
Nomin:		Nomin:
3H07C	X	Y
-0.91 mm		-0.37 mm
Nomin:		Nomin:

HMS

p: +0.5202 θ (TV): 15.79
From GUI Nearest 0.005

SHMS

p: +0.5512 θ (TV): 7.725
From GUI Nearest 0.005

Collimator:

HMS: Large ☒
Sieve ☐

SHMS: Collim ☒
Sieve ☐

Run Number:

13096

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

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

Start time (RC GUI):

10:20

Stop time (RC GUI):

10:37

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

HMS prescale
pretrig: 723 k

$e-\pi n$ evts:

SHMS prescale
pretrig: 475 k

$\Sigma e-\pi n$ evts:

COIN pretrig: k

☒ Data ok

☐ Junk

Run Number:

13097

- ☐ 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

Junk

Run Number:

13098

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

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

Start time (RC GUI):

10:54

Stop time (RC GUI):

11:01

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

HMS prescale
pretrig: 290 k

$e-\pi n$ evts:

SHMS prescale
pretrig: 482 k

$\Sigma e-\pi n$ evts:

COIN pretrig: k

☐ Data ok

☐ Junk

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:

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

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

Use a separate sheet for each configuration.

Date: 21 / 11 / 09
yy mm dd

Initials: SJ

Configuration Name: _____

Heep Singles

Setting 4

E_{beam}: 5.965 GeV

I_{beam}: 6 μ A

Purpose:

☒ Production

☐ Test (e.g. DAQ, Detector)

☐ Optics (SHMS / HMS)

☐ Other: _____

Raster: ☒ On ☐ Off

Size: _____

Beam position and angle
on target:

3H07A	X	Y
-0.5	mm	0
Nomin:		Nomin:
3H07C	X	Y
-0.9	mm	-0.3
Nomin:		Nomin:

HMS

SHMS

Q1	I-SET (from PSU)	A	I-SET (from PSU)	A	HB
	613.31		1814.70		
Q2	B-HALL	T	B-HALL	kG	Q1
	0.82010		11.547		
Q3	I-SET (from PSU)	A	I-SET (from PSU)	A	Q2
	487.79		1138.20		
	B-HALL	T	B-HALL	kG	Q3
	-0.94760		70.8046		
D	I-SET (from PSU)	A	I-SET (from PSU)	A	D
	237.11		1911.46		
	B-HALL	T	B-HALL	kG	D
	0.47988		17.910		
D	I-READ	A	I-SET (from PSU)	A	Q3
	145023		1258.00		
	B-NMR	T	B-HALL	kG	D
	1.28866		12.129		
If momentum increased:			I-SET (from PSU)	A	D
☐ HMS cycled?			1729.84		
☐ SHMS cycled?			B-NMR	kG	D
			-12.592		

Run Number:

13099

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

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

Start time (RC GUI):

11:32

Stop time (RC GUI):

11:40

☒ Settings
Verified?

☒ HV OK?

☒ 50k OK?

HMS
prescale
pretrig: 452 k

$e-\pi n$ evts:

SHMS
prescale
pretrig: 357 k

$\Sigma e-\pi n$ evts:

COIN
pretrig: k

☒ Data ok

☐ Junk

Comments:

Run Number:

13100

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

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

Start time (RC GUI):

11:53

Stop time (RC GUI):

12:05

☒ Settings
Verified?

☒ HV OK?

☒ 50k OK?

HMS
prescale
pretrig: 449 k

$e-\pi n$ evts:

SHMS
prescale
pretrig: 613 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:

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

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

Use a separate sheet for each configuration.

Date: 4 / 11 / 09
yy mm dd

Initials: SJ

Configuration Name: _____

Keep ~~the~~ singles
setting 5

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
-25 mm		0 mm
Nomin:		Nomin:
3H07C	X	Y
-29 mm		-0.3 mm
Nomin:		Nomin:

HMS

SHMS

Q1	I-SET (from PSU) 572.81 B-HALL 276470 T	A	I-SET (from PSU) 1814.65 B-HALL 11.548 T	A	HB
Q2	I-SET (from PSU) 455.34 B-HALL -0.88136 T	A	I-SET (from PSU) 1138.28 B-HALL -8.046 T	A	Q1
Q3	I-SET (from PSU) 221.36 B-HALL 0.44938 T	A	I-SET (from PSU) 1912.04 B-HALL 17.909 T	A	Q2
D	I-READ 135215 B-NMR 1.20320 T	A	I-SET (from PSU) 1257.96 B-HALL 12.131 T	A	Q3
	If momentum increased: ☐ HMS cycled? ☐ SHMS cycled?		I-SET (from PSU) 1729.92 B-NMR -12.592 T	A	D

Run Number:

13101

- ☐ 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 203 k
pretrig: _____
 $e-\pi n$ evts: _____

SHMS
prescale 391 k
pretrig: _____
 $\Sigma e-\pi n$ evts: _____

COIN
pretrig: _____ k
☐ Data ok
☐ Junk

Comments:

Junk forget to save PS

Run Number:

13102

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

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

Start time (RC GUI):

Stop time (RC GUI):

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

HMS
prescale 778 k
pretrig: _____
 $e-\pi n$ evts: _____

SHMS
prescale 632 k
pretrig: _____
 $\Sigma e-\pi n$ evts: _____

COIN
pretrig: _____ k
☒ Data ok
☐ Junk

Comments:

Run Number:

13103

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

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

Start time (RC GUI):

Stop time (RC GUI):

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

HMS
prescale 203 k
pretrig: _____
 $e-\pi n$ evts: _____

SHMS
prescale 391 k
pretrig: _____
 $\Sigma e-\pi n$ evts: _____

COIN
pretrig: _____ k
☐ Data ok
☐ Junk

Comments:

40m/s

Run Number:

13104

- ☐ 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

Comments:

Junk code crash

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

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

Use a separate sheet for each configuration.

Date: 21/11/09
yy mm dd

Initials: _____

Configuration Name: _____

Heep Set Singles
Setting 6

E_{beam}: 5.965 GeV

I_{beam}: 70 μ A

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
-0.5	mm	0
Nomin:		Nomin:
3H07C	X	Y
-0.9	mm	-0.3
Nomin:		Nomin:

HMS

SHMS

Q1	I-SET (from PSU) 487.24 B-HALL 0.64620	A T	I-SET (from PSU) 1814.75 B-HALL 11.548	A T	HB
Q2	I-SET (from PSU) 387.20 B-HALL -0.74554	A T	I-SET (from PSU) 1138.28 B-HALL -8.046	A T	Q1
Q3	I-SET (from PSU) 188.21 B-HALL 0.38148	A T	I-SET (from PSU) 1912.04 B-HALL 17.910	A T	Q2
D	I-READ 1145.35 B-NMR 1.02332	A T	I-SET (from PSU) 1252.96 B-HALL 12.131	A T	Q3
	If momentum increased: ☐ HMS cycled? ☐ SHMS cycled?		I-SET (from PSU) 1729.88 B-NMR -12.592		D

Run Number:

13105

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

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

Start time (RC GUI):

13:41

Stop time (RC GUI):

13:49

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale
pretrig: 45 k

$e-\pi n$ evts:

SHMS prescale
pretrig: 404 k

$\Sigma e-\pi n$ evts:

COIN
pretrig: k

☐ Data ok

☐ Junk

Comments:

40 μ A

Run Number:

13106

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

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

Start time (RC GUI):

13:59

Stop time (RC GUI):

14:11

☒ 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 short beam, 2mins

Run Number:

13107

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

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

Start time (RC GUI):

15:24

Stop time (RC GUI):

15:40

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale
pretrig: 365 k

$e-\pi n$ evts:

SHMS prescale
pretrig: 832 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:

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

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

Use a separate sheet for each configuration.

Date: 21 / 11 / 09
yy mm dd

Initials: PD

HMS

SHMS

Configuration Name: _____

HEEP SINGLES

SETTING 7

E_{beam} : 5.265 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>-0.505</u> mm		<u>-0.003</u> mm
Nomin:		Nomin:
3H07C	X	Y
<u>-0.89</u> mm		<u>-0.9</u> mm
Nomin:		Nomin:

HMS

p : +/- 3.738 θ (TV): 13.790
From GUI Nearest 0.005

SHMS

p : +/- 5.422 θ (TV): 13.790
From GUI Nearest 0.005

Collimator:

HMS: Large Sieve ☒

SHMS: Collim Sieve ☒

Q1	I-SET (from PSU) <u>487.24</u> A B-HALL <u>0.647</u> T	I-SET (from PSU) <u>1814.7</u> A B-HALL <u>11.547</u> kG	HB
Q2	I-SET (from PSU) <u>387.20</u> A B-HALL <u>-0.745</u> T	I-SET (from PSU) <u>1138.28</u> A B-HALL <u>-8.045</u> kG	Q1
Q3	I-SET (from PSU) <u>188.23</u> A B-HALL <u>0.3801</u> T	I-SET (from PSU) <u>1912.00</u> A B-HALL <u>17.910</u> kG	Q2
D	I-READ <u>1145.37</u> A B-NMR <u>1.546</u> T	I-SET (from PSU) <u>1257.92</u> A B-HALL <u>12.131</u> kG	Q3
	If momentum increased: ☐ HMS cycled? ☐ SHMS cycled?	I-SET (from PSU) <u>1729.88</u> A B-NMR <u>-12.592</u> kG	D

Run Number:

13108

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

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

Start time (RC GUI):

16:03

Stop time (RC GUI):

16:16

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale 482 k
pretrig: 113 k

$e-\pi n$ evts:

SHMS prescale 731 k
pretrig: 625 k

$\Sigma e-\pi n$ evts:

COIN pretrig: k

☐ Data ok

☐ Junk

Comments:

70 μA

Run Number:

13109

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

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

Start time (RC GUI):

16:27

Stop time (RC GUI):

16:33

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale 52 k
pretrig: 112 k

$e-\pi n$ evts:

SHMS prescale 82 k
pretrig: 129 k

$\Sigma e-\pi n$ evts:

COIN pretrig: k

☐ Data ok

☐ Junk

Comments:

40 μA

HMS Dipole NMR a little off

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: k

$e-\pi n$ evts:

SHMS prescale k
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 k
pretrig: k

$e-\pi n$ evts:

SHMS prescale k
pretrig: k

$\Sigma e-\pi n$ evts:

COIN pretrig: k

☐ Data ok

☐ Junk

Comments:

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

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

Use a separate sheet for each configuration.

Date: 21 / 11 / 09
yy mm dd

Initials: PD

Configuration Name: _____

KEEP SINGLES

SETTING 8

E_{beam} : 5.965 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
-0.51 mm		0.02 mm
Nomin:		Nomin:
3H07C	X	Y
-0.89 mm		-0.29 mm
Nomin:		Nomin:

HMS

SHMS

Q1	I-SET (from PSU) 426.16 A B-HALL 0.567 T	I-SET (from PSU) 1534 A B-HALL 9.712 kG	HB
Q2	I-SET (from PSU) 338.83 A B-HALL -0.646 T	I-SET (from PSU) 966.84 A B-HALL -6.82 kG	Q1
Q3	I-SET (from PSU) 164.71 A B-HALL 0.331 T	I-SET (from PSU) 1624.2 A B-HALL 15.218 kG	Q2
D	I-READ 1001.73 A B-NMR 0.8955 T	I-SET (from PSU) 1068.36 A B-HALL 10.326 kG	Q3
	If momentum increased: ☐ HMS cycled? ☐ SHMS cycled?	I-SET (from PSU) 1469.12 A B-NMR -10.704 kG	D

Run Number:

13110

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

PS1: -1
PS2: 5
PS3: -1
PS4: 1
PS5: -1
PS6: -1
Mode10: cer / fadc

Start time (RC GUI):

17:26

Stop time (RC GUI):

17:32

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

HMS 10
prescale 10148 k
pretrig: _____
 $e-\pi n$ evts: _____

SHMS 63
prescale 2119 k
pretrig: _____
 $\Sigma e-\pi n$ evts: _____

COIN
pretrig: k

- ☒ Data ok
☐ Junk

Comments:

40 μA → Rates were too low. Taking another run with lower prescale.

Run Number:

13111

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

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

Start time (RC GUI):

17:34

Stop time (RC GUI):

17:38

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

HMS 4
prescale 2248 k
pretrig: _____
 $e-\pi n$ evts: _____

SHMS 165
prescale 2119 k
pretrig: _____
 $\Sigma e-\pi n$ evts: _____

COIN
pretrig: k

- ☐ Data ok
☐ Junk

Comments:

40 μA (lower ps than run 13110)

Run Number:

13112

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

PS1: -1
PS2: 81
PS3: -1
PS4: 0
PS5: -1
PS6: -1
Mode10: cer / fadc

Start time (RC GUI):

17:49

Stop time (RC GUI):

18:05

- ☒ 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:

70 μA Prescales were wrong

Run Number:

13113

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

PS1: -1
PS2: 5
PS3: -1
PS4: 0
PS5: -1
PS6: -1
Mode10: cer / fadc

Start time (RC GUI):

18:07

Stop time (RC GUI):

18:43

- ☒ 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:

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

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

Date: 21/11/09
yy mm dd

Initials: PD

Use a separate sheet for each configuration.

Configuration Name: _____

HEEP SINGLES

SETTING 9

E_{beam} : 5.965 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>-0.51</u> mm		<u>0</u> mm
Nomin:		Nomin:
3H07C	X	Y
<u>-0.01</u> mm		<u>-0.3</u> mm
Nomin:		Nomin:

HMS

SHMS

Q1	I-SET (from PSU) 396.48 A	I-SET (from PSU) 1534.05 A	HB
	B-HALL 0.5238 T	B-HALL 0.712 kG	
Q2	I-SET (from PSU) 315.20 A	I-SET (from PSU) 966.80 A	Q1
	B-HALL -0.60081 T	B-HALL -6.819 kG	
Q3	I-SET (from PSU) 153.23 A	I-SET (from PSU) 1624.20 A	Q2
	B-HALL 0.30883 T	B-HALL 15.218 kG	
D	I-READ 931.59 A	I-SET (from PSU) 1068.36 A	Q3
	B-NMR 0.83307 T 0.30660	B-HALL 10.326 kG	
If momentum increased:		I-SET (from PSU)	D
☐ HMS cycled?		1469.20 A	
☐ SHMS cycled?		B-NMR -10.711 kG	

Run Number:

13114

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

PS1: -1
PS2: 3
PS3: -1
PS4: 0
PS5: -1
PS6: -1
Mode10: cen / fadc

Start time (RC GUI):

19:07

Stop time (RC GUI):

19:10

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

HMS prescale
pretrig: k

$e\pi n$ evts:

SHMS prescale
pretrig: k

$\Sigma e\pi n$ evts:

COIN
pretrig: k

☐ Data ok

☒ Junk

Comments:

HMS DIPOLE TOO LOW!

Run Number:

13116

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

PS1: -1
PS2: 3
PS3: -1
PS4: 0
PS5: -1
PS6: -1
Mode10: cen / fadc

Start time (RC GUI):

19:21

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:

EB2 gave issues. All the scaler rates went to 0.

Run Number:

13119

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

PS1: -1
PS2: 3
PS3: -1
PS4: 0
PS5: -1
PS6: -1
Mode10: cen / fadc

Start time (RC GUI):

19:52

Stop time (RC GUI):

20:15

- ☒ 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:

13120

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

PS1: -1
PS2: 3
PS3: -1
PS4: 0
PS5: -1
PS6: -1
Mode10: cen / fadc

Start time (RC GUI):

20:27

Stop time (RC GUI):

20:34

- ☒ 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:

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

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

Date: 21 / 11 / 09
yy mm dd

Initials: PD

Use a separate sheet for each configuration.

Configuration Name: _____

HEEP SINGLES

SETTING 10

E_{beam} : 5.965 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>-0.50</u> mm		<u>0</u> mm
Nomin:		Nomin:
3H07C	X	Y
<u>-0.88</u> mm		<u>-0.3</u> mm
Nomin:		Nomin:

HMS

SHMS

Q1	I-SET (from PSU)	A	I-SET (from PSU)	A	HB
	<u>396.48</u>		<u>1158.5</u>		
Q2	B-HALL	T	B-HALL	kG	Q1
	<u>0.525</u>		<u>7.331</u>		
Q3	I-SET (from PSU)	A	I-SET (from PSU)	A	Q2
	<u>315.20</u>		<u>733.32</u>		
	B-HALL	T	B-HALL	kG	
	<u>-0.599</u>		<u>-5.149</u>		
D	I-SET (from PSU)	A	I-SET (from PSU)	A	Q3
	<u>153.21</u>		<u>1232.16</u>		
	B-HALL	T	B-HALL	kG	
	<u>0.308</u>		<u>11.547</u>		
D	I-READ	A	I-SET (from PSU)	A	D
	<u>931.62</u>		<u>810.40</u>		
	B-NMR	T	B-HALL	kG	
	<u>0.8331</u>		<u>7.857</u>		
If momentum increased:			I-SET (from PSU)	A	D
☐ HMS cycled?			<u>1114.36</u>		
☐ SHMS cycled?			B-NMR	kG	
			<u>-8.175</u>		

Run Number:

13121

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

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

Start time (RC GUI):

20:50

Stop time (RC GUI):

20:59

☒ 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:

13122

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

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

Start time (RC GUI):

21:10

Stop time (RC GUI):

21:43

☒ 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:

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

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

Date: 21 / 11 / 09
yy mm dd

Initials: PD

Use a separate sheet for each configuration.

Configuration Name: _____

HEEP SINGLES

SETTING 11

E_{beam} : 5.965 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>-0.5</u> mm		<u>0</u> mm
Nomin:		Nomin:
3H07C	X	Y
<u>-0.88</u> mm		<u>-0.31</u> mm
Nomin:		Nomin:

HMS

SHMS

Q1	I-SET (from PSU) <u>396.48</u> A B-HALL <u>0.5251</u> T	I-SET (from PSU) <u>1158.45</u> A B-HALL <u>7.331</u> kG	HB
Q2	I-SET (from PSU) <u>315.20</u> A B-HALL <u>-0.5977</u> T	I-SET (from PSU) <u>733.24</u> A B-HALL <u>-5.149</u> kG	Q1
Q3	I-SET (from PSU) <u>153.20</u> A B-HALL <u>0.3076</u> T	I-SET (from PSU) <u>1232.16</u> A B-HALL <u>11.547</u> kG	Q2
D	I-READ <u>931.59</u> A B-NMR <u>0.83307</u> T	I-SET (from PSU) <u>810.48</u> A B-HALL <u>7.855</u> kG	Q3
	If momentum increased: ☐ HMS cycled? ☐ SHMS cycled?	I-SET (from PSU) <u>1114.44</u> A B-NMR <u>-8.175</u> kG	D

Run Number:

13123

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

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

Start time (RC GUI):

22:07

Stop time (RC GUI):

22:30

- ☒ 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:

We couldn't move SHMS to the desired angle. We are off by 0.05 deg.
We figured it will be good to continue taking data while we are waiting for help.

Run Number:

13124

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

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

Start time (RC GUI):

22:40

Stop time (RC GUI):

22:47

- ☒ 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:

SAME.

Run Number:

13125

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

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 _____
☐ _____

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:

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

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

Date: 21/11/09
yy mm dd

Initials: PD

Use a separate sheet for each configuration.

Configuration Name: _____

HEEP SINGLES

SETTING 12

E_{beam} : 5.964 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>-0.51</u>	<u>-0.508</u> mm	<u>-0.508</u> mm
Nomin:	Nomin:	Nomin:
3H07C	X	Y
<u>-0.92</u> mm	<u>-0.30</u> mm	
Nomin:	Nomin:	Nomin:

HMS

SHMS

Q1	I-SET (from PSU) <u>306.48</u> A	A	I-SET (from PSU) <u>1158.55</u> A	A	HB
	B-HALL <u>0.5275</u> T	T	B-HALL <u>7.331</u> kG		
Q2	I-SET (from PSU) <u>315.20</u> A	A	I-SET (from PSU) <u>733.20</u> A	A	Q1
	B-HALL <u>-0.6004</u> T	T	B-HALL <u>-5.147</u> kG		
Q3	I-SET (from PSU) <u>153.21</u> A	A	I-SET (from PSU) <u>1232.12</u> A	A	Q2
	B-HALL <u>0.3056</u> T	T	B-HALL <u>11.547</u> kG		
D	I-READ <u>931.62</u> A	A	I-SET (from PSU) <u>810.40</u> A	A	Q3
	B-NMR <u>0.83307</u> T	T	B-HALL <u>7.855</u> kG		
If momentum increased:				I-SET (from PSU)	D
☐ HMS cycled? ☐ SHMS cycled?				<u>1114.48</u> A B-NMR <u>-8.181</u> kG	

Run Number:

13126

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

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

Start time (RC GUI):

00:03

Stop time (RC GUI):

00:28

☒ Settings
Verified?

☒ HV OK?

☒ 50k OK?

HMS
prescale
pretrig: 72 k

$e-\pi n$ evts:

0

SHMS 1055
prescale
pretrig: 1455 k

$\Sigma e-\pi n$ evts:

COIN
pretrig: 0 k

☐ Data ok

☐ Junk

Comments:

+5 min for inconsistent beam.

Run Number:

13127

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

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

Start time (RC GUI):

00:40

Stop time (RC GUI):

00:50

☒ Settings
Verified?

☒ HV OK?

☐ 50k OK?

HMS
prescale
pretrig: 10 k

$e-\pi n$ evts:

0

SHMS
prescale
pretrig: 60 k

$\Sigma e-\pi n$ evts:

COIN
pretrig: 0 k

☐ Data ok

☐ Junk

Comments:

+4 min for inconsistent beam

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:

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

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

Date: 21/11/10
yy mm dd

Initials: SAS

Use a separate sheet for each configuration.

Configuration Name: _____

Heep Corn #2
(Dummy return)

E_{beam} : 5.986 GeV

I_{beam} : 40 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>-0.5</u> mm		<u>0.0</u> mm
Nomin:		Nomin:
3H07C	X	Y
<u>-0.9</u> mm		<u>-0.5</u> mm
Nomin:		Nomin:

HMS

SHMS

Q1	I-SET (from PSU) <u>1126.15</u> A B-HALL	I-SET (from PSU) <u>1158.40</u> A B-HALL	HB
	<u>0.56750</u> T	<u>-7.332</u> kG	
Q2	I-SET (from PSU) <u>338.84</u> A B-HALL	I-SET (from PSU) <u>733.24</u> A B-HALL	Q1
	<u>8 -0.648</u> T	<u>5.233</u> kG	
Q3	I-SET (from PSU) <u>164.70</u> A B-HALL	I-SET (from PSU) <u>1232.20</u> A B-HALL	Q2
	<u>0.328</u> T	<u>-11.619</u> kG	
D	I-READ <u>1001.76</u> A B-NMR	I-SET (from PSU) <u>810.48</u> A B-HALL	Q3
	<u>0.89548</u> T	<u>-7.880</u> kG	
	If momentum increased: ☒ HMS cycled? ☒ SHMS cycled?	I-SET (from PSU) <u>1114.40</u> A B-NMR	D
		<u>8.093</u> kG	

Run Number:

13128

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

PS1: 6
PS2: -1
PS3: -1
PS4: 6
PS5: 6
PS6: -1
Mode10: 20 / fadc

Start time (RC GUI):

06:09

Stop time (RC GUI):

06:29

☒ Settings
Verified?

☒ HV OK?

☒ 50k OK?

HMS
prescale
pretrig: 25 k

$e-\pi n$ evts:

19

SHMS
prescale
pretrig: 110 k

$\Sigma e-\pi n$ evts:

COIN
pretrig: 12 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: