

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

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

Use a separate sheet for each configuration.

Date: 21/09/17
yy mm dd

Initials: CC

HMS

SHMS

Configuration Name:

Heep Singles 1

E_{beam}: 9.157 GeV

I_{beam}: 40/70 μ A

Purpose:

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

Raster: ☒ On ☐ Off
Size: 2x2

Beam position and angle on target:

3H07A	X	Y
-1.5	mm	0.0
Nomin:		
3H07C	X	Y
-0.9	mm	-0.3
Nomin:		

Q1	I-SET (from PSU) 769.95 A B-HALL 1.028 T	I-SET (from PSU) 2900.00 A B-HALL 18.369 KG	HB
Q2	I-SET (from PSU) 619.63 A B-HALL -1.208 T	I-SET (from PSU) 1782.88 A B-HALL -12.514 KG	Q1
Q3	I-SET (from PSU) 296.98 A B-HALL 0.597 T	I-SET (from PSU) 2977.24 A B-HALL 27.861 KG	Q2
D	I-READ 1922.01 A B-NMR 1.62813 T	I-SET (from PSU) 1958.96 A B-HALL 18.818 KG	Q3
	If momentum increased: ☒ HMS cycled? ☒ SHMS cycled?	I-SET (from PSU) 2693.64 A B-NMR -19.534 KG	D

Run Number:

12079

- ☒ 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 (from RC):

Stop time (from RC):

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:

12080

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

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

Start time (from RC):

Stop time (from RC):

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:

Ignore comment... , Heep Singles, not production, Coda R0End failed

Run Number:

12081

- ☐ 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 (from RC):

Stop time (from RC):

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 (from RC):

Stop time (from RC):

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: 21/09/17
yy mm dd

Initials: cc

Configuration Name:

HeeP Singles 2

Purpose:

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

Raster: ☒ On ☐ Off
Size: 2x2

Beam position and angle on target:

3H07A	X	Y
-1.5	mm	0.0
Nomin:		Nomin:
3H07C	X	Y
-1.9	mm	-1.3
Nomin:		Nomin:

HMS

p: +0 5.900
From GUI

θ (TV): 19.880
Nearest 0.005

SHMS

p: +0 8.035
From GUI

θ (TV): 7.065
Nearest 0.005

Collimator:

HMS: Large ☒ Sieve ☐

SHMS: Collim ☒ Sieve ☐

HMS

SHMS

Q1	I-SET (from PSU) 769.95 B-HALL 1.028 T	A	I-SET (from PSU) 2747.70 B-HALL 17.443 kg	A	HB
Q2	I-SET (from PSU) 619.63 B-HALL -1.208 T	A	I-SET (from PSU) 1696.60 B-HALL -11.940 kg	A	Q1
Q3	I-SET (from PSU) 296.98 B-HALL 0.597 T	A	I-SET (from PSU) 2833.00 B-HALL 26.557 kg	A	Q2
D	I-READ 1922.01 B-NMR 1.62813 T	A	I-SET (from PSU) 1864.20 B-HALL 17.923 kg	A	Q3
	If momentum increased: ☐ HMS cycled? ☒ SHMS cycled?		I-SET (from PSU) 2563.16 B-NMR -18.34 kg	A	D

Run Number:

12082

- ☒ 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:

12083

- ☒ 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):

Stop time (RC GUI):

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

HMS prescale
pretrig: 214 k

$e-\pi n$ evts:

SHMS prescale
pretrig: 1902 k

$\Sigma e-\pi n$ evts:

COIN
pretrig: _____ k

- ☐ Data ok
☐ Junk

Comments:

Run Number:

12084

- ☒ 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):

Stop time (RC GUI):

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

HMS prescale
pretrig: 31 k

$e-\pi n$ evts:

SHMS prescale
pretrig: 274 k

$\Sigma e-\pi n$ evts:

COIN
pretrig: _____ k

- ☐ Data ok
☐ Junk

Comments:

Run Number:

12085

- ☐ 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):

Stop time (RC GUI):

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

HMS prescale
pretrig: 30 k

$e-\pi n$ evts:

SHMS prescale
pretrig: 297 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: 21/09/17
yy mm dd

Initials: EC

Use a separate sheet for each configuration.

Configuration Name: _____

Heep Singles 3

Purpose:

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

Raster: ☒ On ☐ Off
Size: 2x2mm

Beam position and angle on target:

3H07A	X	Y
<u>-1.5</u> mm		<u>0.0</u> mm
Nomin:		Nomin:
3H07C	X	Y
<u>-1.9</u> mm		<u>-1.3</u> mm
Nomin:		Nomin:

HMS

SHMS

Q1	I-SET (from PSU) <u>769.95</u> A B-HALL <u>1.028</u> T	I-SET (from PSU) <u>2709.40</u> A B-HALL <u>17.166</u> kg	HB
Q2	I-SET (from PSU) <u>619.63</u> A B-HALL <u>-1.208</u> T	I-SET (from PSU) <u>1674.40</u> A B-HALL <u>-11.775</u> kg	Q1
Q3	I-SET (from PSU) <u>296.98</u> A B-HALL <u>0.597</u> T	I-SET (from PSU) <u>2796.52</u> A B-HALL <u>26.231</u> kg	Q2
D	I-READ <u>1,922.01</u> A B-NMR <u>1.62813</u> T	I-SET (from PSU) <u>1840.00</u> A B-HALL <u>17.677</u> kg	Q3
	If momentum increased: ☐ HMS cycled? ☒ SHMS cycled?	I-SET (from PSU) <u>2530.04</u> A B-NMR <u>-18.388</u> kg	D

Run Number:

12086

Comments:

- ☒ 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):

04:37:16

Stop time (RC GUI):

04:52:16

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale 212 k
pretrig: _____

$e-\pi n$ evts: _____

SHMS prescale 199 k
pretrig: _____

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

COIN pretrig: _____ k

☒ Data ok

☐ Junk

Run Number:

12087

Comments:

- ☒ 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):

04:53:43

Stop time (RC GUI):

05:00:38

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale 94 k
pretrig: _____

$e-\pi n$ evts: _____

SHMS prescale 348 k
pretrig: _____

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

COIN pretrig: _____ k

☒ Data ok

☐ Junk

Run Number:

12088

Comments:

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

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

Start time (RC GUI):

05:08:09

Stop time (RC GUI):

05:16:04

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale 32 k
pretrig: _____

$e-\pi n$ evts: _____

SHMS prescale 468 k
pretrig: _____

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

COIN pretrig: _____ k

☒ Data ok

☐ Junk

Run Number:

Comments:

- ☐ 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

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

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

Date: 21/09/17
yy mm dd

Initials: *CC*

Use a separate sheet for each configuration.

Configuration Name: _____

Heep Singles 4

Purpose:

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

Raster: ☒ On ☐ Off
Size: *2x2 mm*

Beam position and angle on target:

3H07A	X	Y
<i>-1.5</i>	mm	<i>0.0</i> mm
Nomin:		Nomin:
3H07C	X	Y
<i>-1.9</i>	mm	<i>-1.3</i> mm
Nomin:		Nomin:

HMS

SHMS

Q1	I-SET (from PSU) <i>677.89</i> A B-HALL <i>0.905</i> T	I-SET (from PSU) <i>2477.70</i> A B-HALL <i>15.688</i> kg	HB
Q2	I-SET (from PSU) <i>540.36</i> A B-HALL <i>-1.054</i> T	I-SET (from PSU) <i>1538.84</i> A B-HALL <i>-10.831</i> kg	Q1
Q3	I-SET (from PSU) <i>261.96</i> A B-HALL <i>0.528</i> T	I-SET (from PSU) <i>2572.64</i> A B-HALL <i>24.112</i> kg	Q2
D	I-READ <i>1623.00</i> A B-NMR <i>1.42558</i> T	I-SET (from PSU) <i>1692.76</i> A B-HALL <i>16.240</i> kg	Q3
	If momentum increased: ☐ HMS cycled? ☒ SHMS cycled?	I-SET (from PSU) <i>2327.52</i> A B-NMR <i>-16.916</i> kg	D

Run Number:

12089

Comments:

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

PS1: *-1*
PS2: *86*
PS3: *0*
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- π n evts: _____

SHMS prescale
pretrig: _____ k
 Σ *e- π n* evts: _____

COIN
pretrig: _____ k
☐ Data ok
☒ Junk

Run Number:

12090

Comments:

- ☒ 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):

Stop time (RC GUI):

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

HMS prescale
pretrig: *91* k
e- π n evts: _____

SHMS prescale
pretrig: *1563* k
 Σ *e- π n* evts: _____

COIN
pretrig: _____ k
☒ Data ok
☐ Junk

Run Number:

12091

Comments:

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

PS1: *-1*
PS2: *6*
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: *10* k
e- π n evts: _____

SHMS prescale
pretrig: *1474* k
 Σ *e- π n* evts: _____

COIN
pretrig: _____ k
☒ Data ok
☐ Junk

CodaRcEnd Error

Run Number:

Comments:

- ☐ 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- π n evts: _____

SHMS prescale
pretrig: _____ k
 Σ *e- π 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: 21/09/17
yy mm dd

Initials: CC

Use a separate sheet for each configuration.

Configuration Name:

HeeP Singles

Purpose:

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

Raster: ☒ On ☐ Off
Size: 2x2 mm

Beam position and angle on target:

3H07A	X	Y
-1.5	mm	0.0
Nomin:		Nomin:
3H07C	X	Y
-1.9	mm	-1.3
Nomin:		Nomin:

HMS

SHMS

Q1	I-SET (from PSU) 677.834 A B-HALL 0.9032 T	I-SET (from PSU) 2271.1 A B-HALL 14.398 kG	HB
Q2	I-SET (from PSU) 540.345 A B-HALL -1.0537 T	I-SET (from PSU) 1415.45 A B-HALL -9.970 kG	Q1
Q3	I-SET (from PSU) 261.882 A B-HALL 0.52913 T	I-SET (from PSU) 2369.67 A B-HALL 22.238 kG	Q2
D	I-READ 1624.69 A B-NMR 1.42558 T	I-SET (from PSU) 1559.22 A B-HALL 14.985 kG	Q3
	If momentum increased: ☐ HMS cycled? ☐ SHMS cycled?	I-SET (from PSU) 2143.77 A B-NMR -15.608 kG	D

Run Number:

12092

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

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

Start time (RC GUI):

06:33:18

Stop time (RC GUI):

07:20

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale
pretrig: 192 k

$e-\pi n$ evts:

SHMS prescale
pretrig: 1882 k

$\Sigma e-\pi n$ evts:

COIN pretrig: k

☒ Data ok

☐ Junk

Comments:

2.07 m events

Run Number:

12093

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

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

Start time (RC GUI):

07:27:34

Stop time (RC GUI):

07:34:03

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale
pretrig: 10 k

$e-\pi n$ evts:

SHMS prescale
pretrig: 276 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/fpl/

Date: 21/09/17
yy mm dd

Initials: CC

Use a separate sheet for each configuration.

Configuration Name: _____

Heep Singles 6

Purpose:

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

Raster: ☒ On ☐ Off
Size: 2x2mm

Beam position and angle on target:

3H07A	X	Y
-1.5	mm	0.0
Nomin:		Nomin:
3H07C	X	Y
-0.9	mm	-1.3
Nomin:		Nomin:

HMS

SHMS

Q1	I-SET (from PSU) <u>677.90</u> A B-HALL <u>0.904</u> T	I-SET (from PSU) <u>2270.40</u> A B-HALL <u>14.398</u> kg	HB
Q2	I-SET (from PSU) <u>540.36</u> A B-HALL <u>-1.054</u> T	I-SET (from PSU) <u>1415.36</u> A B-HALL <u>-9.970</u> kg	Q1
Q3	I-SET (from PSU) <u>261.98</u> A B-HALL <u>0.526</u> T	I-SET (from PSU) <u>2364.20</u> A B-HALL <u>22.236</u> kg	Q2
D	I-READ <u>1623.00</u> A B-NMR <u>1.42558</u> T	I-SET (from PSU) <u>1558.88</u> A B-HALL <u>14.986</u> kg	Q3
	If momentum increased: ☐ HMS cycled? ☒ SHMS cycled?	<u>2143.32</u> A B-NMR <u>-15.607</u> kg	D

HMS

p: +05.202 θ (TV): 23.530
From GUI Nearest 0.005

SHMS

p: +06.719 θ (TV): 11.730
From GUI Nearest 0.005

Collimator:

HMS: Large ☒ Sieve ☐

SHMS: Collim ☒ Sieve ☐

Run Number:

12094

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

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

Start time (RC GUI):

07:44:25

Stop time (RC GUI):

08:15:16

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale

106 k

$e-\pi\pi$ evts:

SHMS prescale

1677 k

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

COIN pretrig:

1 k

☒ Data ok

☐ Junk

Comments:

LH2, 70 μ A

Run Number:

12095

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

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

Start time (RC GUI):

8:36:02

Stop time (RC GUI):

08:48:26

☐ Settings Verified?

☐ HV OK?

☐ 50k OK?

HMS prescale

12 k

$e-\pi\pi$ evts:

SHMS prescale

83 k

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

COIN pretrig:

1 k

☐ Data ok

☒ Junk

Comments:

40 μ A

SHMS rate 0.2 Hz due to ps2 = -1

Run Number:

12096

- ☐ 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):

08:50

Stop time (RC GUI):

?

☐ Settings Verified?

☐ HV OK?

☐ 50k OK?

HMS prescale

13 k

$e-\pi\pi$ evts:

SHMS prescale

690 k

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

COIN pretrig:

1 k

☐ Data ok

☒ Junk

Comments:

ps2 = 0 Recalibrate COIN after end run (~1min)

Run Number:

12097

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

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

Start time (RC GUI):

09:00:06

Stop time (RC GUI):

09:13:12

☒ Settings Verified?

☒ HV OK?

☐ 50k OK?

HMS prescale

13 k

$e-\pi\pi$ evts:

SHMS prescale

690 k

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

COIN pretrig:

1 k

☒ Data ok

☐ Junk

Comments:

PS2 = 4

no End of Run GUI?

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

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

Date: 2021/09/17
yy mm dd

Initials: CEH

Use a separate sheet for each configuration.

Configuration Name:

HEEP singles 7

Purpose:

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

Raster: ☒ On ☐ Off
Size: 2 x 2 (mm)²

Beam position and angle on target:

3H07A	X	Y
-0.5 mm		0.0 mm
Nomin:		Nomin:
3H07C	X	Y
-0.9 mm		-0.3 mm
Nomin:		Nomin:

HMS

SHMS

Q1	I-SET (from PSU) 677.89 A B-HALL 0.90630 T	I-SET (from PSU) 2270.40 A B-HALL 14.397 KG	HB
Q2	I-SET (from PSU) 540.36 A B-HALL -1.053 T	I-SET (from PSU) 1415.28 A B-HALL -9.970 KG	Q1
Q3	I-SET (from PSU) 261.96 A B-HALL 0.526 T	I-SET (from PSU) 2369.28 A B-HALL 22.236 KG	Q2
D	I-READ 1623.00 A B-NMR 1.42558 T	I-SET (from PSU) 1558.88 A B-HALL 14.985 KG	Q3
	If momentum increased: ☐ HMS cycled? ☐ SHMS cycled?	I-SET (from PSU) 2143.32 A B-NMR -15.607 KG	D

Run Number:

12098

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

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

Start time (RC GUI):

09:20:06

Stop time (RC GUI):

10:28:03

Settings Verified?

☐

HV OK?

☒

50k OK?

☐

HMS prescale

pretrig: k

$e-\pi$ evts:

☐

$\Sigma e-\pi$ evts:

☐

SHMS prescale

pretrig: k

$\Sigma e-\pi$ evts:

☐

$\Sigma e-\pi$ evts:

☐

COIN pretrig: k

☐

Data ok

☒

Junk

☐

Comments:

Singles 1 min of beam in 90 min day
concat with run 12097

Run Number:

12098

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

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

Start time (RC GUI):

10:33:08

Stop time (RC GUI):

10:45:53

Settings Verified?

☒

HV OK?

☒

50k OK?

☐

HMS prescale

pretrig: k

$e-\pi$ evts:

☐

$\Sigma e-\pi$ evts:

☐

SHMS prescale

pretrig: k

$\Sigma e-\pi$ evts:

☐

$\Sigma e-\pi$ evts:

☐

COIN pretrig: k

☐

Data ok

☒

Junk

☐

Comments:

Singles no beam

Run Number:

12099

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

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

Start time (RC GUI):

11:57:10

Stop time (RC GUI):

12:14:50

Settings Verified?

☒

HV OK?

☒

50k OK?

☒

HMS prescale

pretrig: 74 k

$e-\pi$ evts:

☐

$\Sigma e-\pi$ evts:

☐

SHMS prescale

pretrig: 1093 k

$\Sigma e-\pi$ evts:

☐

$\Sigma e-\pi$ evts:

☐

COIN pretrig: k

☐

Data ok

☒

Junk

☐

Comments:

Run Number:

12100

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

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

Start time (RC GUI):

12:48:16

Stop time (RC GUI):

12:56:04

Settings Verified?

☒

HV OK?

☒

50k OK?

☒

HMS prescale

pretrig: 10 k

$e-\pi$ evts:

☐

$\Sigma e-\pi$ evts:

☐

SHMS prescale

pretrig: 344 k

$\Sigma e-\pi$ evts:

☐

$\Sigma e-\pi$ evts:

☐

COIN pretrig: k

☐

Data ok

☒

Junk

☐

Comments:

40 μ A

p(e,e' π)n Run Sheet

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

Use a separate sheet for each configuration.

Date: 21/09/17
yy mm dd

Initials: *jm*

HMS

SHMS

Configuration Name: _____

Keep Single 6.5

Dummy take 2

Purpose:

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

Raster: ☒ On ☐ Off
Size: 2x2

Beam position and angle on target:

3H07A	X	Y
-0.5 mm		0.0 mm
Nomin:		Nomin:
3H07C	X	Y
-0.1 mm		-0.3 mm
Nomin:		Nomin:

HMS

p: +0 5.22 θ (TV): 2353
From GUI Nearest 0.005

SHMS

p: +0 6.719 θ (TV): 11135
From GUI Nearest 0.005

Collimator:

HMS: Large Sieve ☒

SHMS: Collim Sieve ☒

Run Number:

12101

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

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

Start time (RC GUI):

13:07:31

Stop time (RC GUI):

13:13:27

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale

8 k

$e-\pi n$ evts:

SHMS prescale

671 k

$\Sigma e-\pi n$ evts:

COIN pretrig:

k

☒ Data ok

☐ Junk

Comments:

Just to make sure we got this setting (last ended odd)

Run Number:

12102

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

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

Start time (RC GUI):

13:40:55

Stop time (RC GUI):

14:06:37

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale

k

$e-\pi n$ evts:

SHMS prescale

k

$\Sigma e-\pi n$ evts:

COIN pretrig:

k

☐ Data ok

☒ Junk

Comments:

70 μ A

Run Number:

12103

- ☐ 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):

14:17:53

Stop time (RC GUI):

14:23:19

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale

k

$e-\pi n$ evts:

SHMS prescale

k

$\Sigma e-\pi n$ evts:

COIN pretrig:

k

☐ Data ok

☒ Junk

Comments:

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

$e-\pi n$ evts:

SHMS prescale

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: 2021 09 17
yy mm dd

Initials: _____

HMS

SHMS

Configuration Name: _____

HEEP Singlet 8

Purpose:

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

Raster: ☒ On ☐ Off
Size: 2 x 2 mm

Beam position and angle on target:

3H07A	X	Y
-0.5	mm	0.0
Nomin:		Nomin:
3H07C	X	Y
-0.9	mm	-0.3
Nomin:		Nomin:

Q1	I-SET (from PSU) B-HALL 677.89 A 0.9020 T	I-SET (from PSU) B-HALL 2270.45 A 14397 kg	HB
Q2	I-SET (from PSU) B-HALL 540.36 A -1.055 T	I-SET (from PSU) B-HALL 1415.32 A -9.970 kg	Q1
Q3	I-SET (from PSU) B-HALL 261.96 A 0.525 T	I-SET (from PSU) B-HALL 2369.32 A 22.236 kg	Q2
D	I-READ B-NMR 1623.00 A 1.42557 T	I-SET (from PSU) B-HALL 1558.88 A 14.986 kg	Q3
	If momentum increased: ☐ HMS cycled? ☐ SHMS cycled?	I-SET (from PSU) B-NMR 2143.32 A -15.613 kg	D

Run Number:

12102

Comments:

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

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

Start time (RC GUI):

13:40:55

Stop time (RC GUI):

14:06:37

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale
pretrig: 506 k

$e-\pi n$ evts:

SHMS prescale
pretrig: 1036 k

$\Sigma e-\pi n$ evts:

COIN pretrig: k

☒ Data ok

☐ Junk

Run Number:

12103

Comments:

- ☐ 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):

14:17:53

Stop time (RC GUI):

14:23:19

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale
pretrig: 8 k

$e-\pi n$ evts:

SHMS prescale
pretrig: 533 k

$\Sigma e-\pi n$ evts:

COIN pretrig: k

☒ Data ok

☐ Junk

Run Number:

Comments:

- ☐ 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:

Comments:

- ☐ 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/

Date: 21 / 09 / 12
yy mm dd

Initials: fm

Use a separate sheet for each configuration.

Configuration Name: _____

Heep Singles 9

E_{beam}: 9.158 GeV

I_{beam}: 70 μ A

Purpose:

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

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>677.89</u> A B-HALL <u>0.90080</u> T	I-SET (from PSU) <u>2270.50</u> A B-HALL <u>14.347</u> kG	HB
Q2	I-SET (from PSU) <u>540.36</u> A B-HALL <u>-1.05389</u> T	I-SET (from PSU) <u>1415.36</u> A B-HALL <u>-9.970</u> kG	Q1
Q3	I-SET (from PSU) <u>261.98</u> A B-HALL <u>0.52484</u> T	I-SET (from PSU) <u>2369.20</u> A B-HALL <u>22.238</u> kG	Q2
D	I-READ <u>1623.00</u> A B-NMR <u>1.42557</u> T	I-SET (from PSU) <u>1558.92</u> A B-HALL <u>14.985</u> kG	Q3
	If momentum increased: ☐ HMS cycled? ☐ SHMS cycled?	I-SET (from PSU) <u>2143.28</u> A B-NMR <u>-15.607</u> kG	D

Run Number:

12104

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

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

Start time (RC GUI):

14:35:40

Stop time (RC GUI):

14:38:05

- ☐ 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:

PS Code issue

Run Number:

12105

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

PS1: -1
PS2: 4
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:

70

Run Number:

12106

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

PS1: -1
PS2: 3
PS3: 0
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: 83 k
 $e-\pi n$ evts: _____

SHMS prescale
pretrig: 1162 k
 $\Sigma e-\pi n$ evts: _____

COIN pretrig: _____ k
☒ Data ok
☐ Junk

Comments:

70 μ A

Run Number:

12107

- ☐ 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:

Resetting CoLa

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

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

Date: 21, 9, 17
yy mm dd

Initials: CEM

Continuation of Configuration:

Heep Singles 9

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

Run Number: 12098 12108	☒ 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): 15:18:26 Stop time (RC GUI): 15:24:44	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 9 k $e-\pi n$ evts: /	SHMS prescale pretrig: 397 k $\Sigma e-\pi n$ evts: /	COIN pretrig: / k ☒ Data ok ☐ Junk
Comments: Dummy 10cm							

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:							

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 / 9 / 17
yy mm dd

Initials: SJK

Use a separate sheet for each configuration.

Configuration Name: _____

Heep Single 10

E_{beam}: 9.158 GeV

I_{beam}: 70 μ A

HMS

p: 4.707 θ (TV): 25.00
From GUI Nearest 0.005

SHMS

p: 6.7190 θ (TV): 17.790
From GUI Nearest 0.005

Collimator:

HMS: Large ☒ Sieve ☐

SHMS: Collim ☒ Sieve ☐

Purpose:

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

Raster: ☒ On ☐ Off
Size: 2x2

Beam position and angle on target:

3H07A	X	Y
<u>-0.5</u>	mm	<u>-0.01</u> mm
Nomin:	<u>-0.5</u>	Nomin: <u>0.0</u>
3H07C	X	Y
<u>-0.89</u>	mm	<u>-0.29</u> mm
Nomin:	<u>-0.9</u>	Nomin: <u>-0.3</u>

HMS

SHMS

Q1	I-SET (from PSU) <u>6123.208</u> A B-HALL <u>0.817</u> T	I-SET (from PSU) <u>2270.10</u> A B-HALL <u>14.398</u> kG	HB
Q2	I-SET (from PSU) <u>487.7670</u> A B-HALL <u>-0.94888</u> T	I-SET (from PSU) <u>1415.45</u> A B-HALL <u>-9.970</u> kG	Q1
Q3	I-SET (from PSU) <u>237.002</u> A B-HALL <u>0.47813</u> T	I-SET (from PSU) <u>2369.67</u> A B-HALL <u>22.236</u> kG	Q2
D	I-READ <u>1450.14</u> A B-NMR <u>1.28860</u> T	I-SET (from PSU) <u>1559.22</u> A B-HALL <u>14.986</u> kG	Q3
	If momentum increased: ☒ HMS cycled? ☒ SHMS cycled?	<u>2143.77</u> A B-NMR <u>-15.607</u> kG	D

Run Number:

12109

- ☐ 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 / fad

Start time (RC GUI):

15:57

Stop time (RC GUI):

16:04

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

HMS prescale
pretrig: 11 k
 $e-\pi n$ evts: _____

SHMS prescale
pretrig: 206 k
 $\Sigma e-\pi n$ evts: _____

COIN pretrig: _____ k
☒ Data ok
☐ Junk

Comments:

Dummy run

Run Number:

12110

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

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

Start time (RC GUI):

16:05

Stop time (RC GUI):

16:10

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

HMS prescale
pretrig: 8 k
 $e-\pi n$ evts: _____

SHMS prescale
pretrig: 138 k
 $\Sigma e-\pi n$ evts: _____

COIN pretrig: _____ k
☐ Data ok
☐ Junk

Comments:

DUMMY

LEP2 DATA OPPORTUNISTIC bonus DUMMY (Shift Changeover at MCC)

Run Number:

12111

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

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

Start time (RC GUI):

16:19

Stop time (RC GUI):

16:30

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

HMS prescale
pretrig: 63 k
 $e-\pi n$ evts: _____

SHMS prescale
pretrig: 650 k
 $\Sigma e-\pi n$ evts: _____

COIN pretrig: _____ k
☐ Data ok
☐ Junk

Comments:

CODA Crash at end

Run Number:

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

PS1: _____
PS2: _____
PS3: _____
PS4: _____
PS5: _____
PS6: _____
Mode10: cer / fad

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 / 4 / 17
yy mm dd

Initials: STDK

HMS

SHMS

Configuration Name: _____

Heep Single (11)

Purpose:

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

E_{beam}: 9.203 GeV

I_{beam}: 70 μ A

Raster: ☒ On ☐ Off
Size: 2x2 nm

Beam position and angle on target:

3H07A	X	Y
<u>-0.51</u> mm		<u>-0.02</u> mm
Nomin: <u>-0.5</u>		Nomin: <u>0.0</u>
3H07C	X	Y
<u>-0.9</u> mm		<u>-0.31</u> mm
Nomin: <u>-0.9</u>		Nomin: <u>-0.3</u>

Q1	I-SET (from PSU) <u>613.268</u> A B-HALL <u>0.81770</u> T	I-SET (from PSU) <u>2110.07</u> A B-HALL <u>13.385</u> kG	HB
Q2	I-SET (from PSU) <u>487.767</u> A B-HALL <u>-0.94911</u> T	I-SET (from PSU) <u>1317.90</u> A B-HALL <u>-9.315</u> kG	Q1
Q3	I-SET (from PSU) <u>237.002</u> A B-HALL <u>0.47514</u> T	I-SET (from PSU) <u>2209.55</u> A B-HALL <u>20.688</u> kG	Q2
D	I-READ <u>1450.14</u> A B-NMR <u>1.28860</u> T	I-SET (from PSU) <u>1453.86</u> A B-HALL <u>14.004</u> kG	Q3
	If momentum increased: ☒ HMS cycled? ☒ SHMS cycled?	I-SET (from PSU) <u>1498.91</u> A B-NMR <u>-14.560</u> kG	D

Run Number:

12113

- ☒ 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):

16:45

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:

CODA CRASH → PS WRONG - JUNK

Run Number:

12115

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

PS1: -1
PS2: 7
PS3: 0.1
PS4: 0
PS5: -1
PS6: -1
Mode10: cer / fadc

Start time (RC GUI):

16:47

Stop time (RC GUI):

17:30

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

HMS 244 prescale: _____ k
pretrig: _____
 $e-\pi n$ evts: _____

SHMS 2209 prescale: _____ k
pretrig: _____
 $\Sigma e-\pi n$ evts: _____

COIN pretrig: _____ k
☒ Data ok
☐ Junk

Comments:

LH2 @ 70 μ A

Run Number:

12116

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

PS1: -1
PS2: 5
PS3: 0.1
PS4: 0
PS5: -1
PS6: -1
Mode10: cer / fadc

Start time (RC GUI):

17:39

Stop time (RC GUI):

17:45

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

HMS 9 prescale: _____ k
pretrig: _____
 $e-\pi n$ evts: _____

SHMS 228 prescale: _____ k
pretrig: _____
 $\Sigma e-\pi n$ evts: _____

COIN pretrig: _____ k
☒ Data ok
☐ Junk

Comments:

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
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: 21/9/2017 Initials: SJK
yy mm dd

HMS

SHMS

Configuration Name:

Heep Sing #12

Purpose:

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

E_{beam}: 9.26 GeV

I_{beam}: 70 μ A

Raster: ☒ On ☐ Off
Size: 2x2mm

Beam position and angle on target:

3H07A	X	Y
<u>-0.50</u> mm		<u>0.01</u> mm
Nomin: <u>-0.5</u>		Nomin: <u>0.0</u>
3H07C	X	Y
<u>-0.90</u> mm		<u>-0.19</u> mm
Nomin: <u>-0.9</u>		Nomin: <u>-0.3</u>

Q1	I-SET (from PSU) <u>613.268</u> A B-HALL	I-SET (from PSU) <u>2110.07</u> A B-HALL	HB
Q2	I-SET (from PSU) <u>0.81770</u> T B-HALL	I-SET (from PSU) <u>13.385</u> A B-HALL	Q1
Q3	I-SET (from PSU) <u>487.767</u> A B-HALL	I-SET (from PSU) <u>1317.40</u> A B-HALL	Q2
D	I-SET (from PSU) <u>-0.41441</u> T B-HALL	I-SET (from PSU) <u>-9.315</u> A B-HALL	Q3
	I-SET (from PSU) <u>237.002</u> A B-HALL	I-SET (from PSU) <u>2209.55</u> A B-HALL	D
	I-SET (from PSU) <u>0.47519</u> T B-HALL	I-SET (from PSU) <u>20.688</u> A B-HALL	
	I-READ <u>1450.14</u> A B-NMR	I-SET (from PSU) <u>1453.86</u> A B-HALL	
	I-SET (from PSU) <u>1.28866</u> T B-NMR	I-SET (from PSU) <u>14.004</u> A B-HALL	
	If momentum increased: ☐ HMS cycled? ☒ SHMS cycled?	I-SET (from PSU) <u>1998.91</u> A B-NMR	
		<u>-14.550</u> A B-NMR	

Run Number:

12117

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

PS1: -1
PS2: 2
PS3: -1
PS4: 0
PS5: -1
PS6: -1
Mode10: cer / fadc

Start time (RC GUI):

17:53

Stop time (RC GUI):

18:08

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

HMS prescale
pretrig: 22 k

$e-\pi n$ evts:

SHMS prescale
pretrig: 733 k

$\Sigma e-\pi n$ evts:

COIN pretrig: ✓ k

- ☒ Data ok
☐ Junk

Comments:

Dummy @ 40 μ A, ~3 minute beam trip during run

Run Number:

12118

- ☒ 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):

18:51

Stop time (RC GUI):

18:06

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

HMS prescale
pretrig: 41 k

$e-\pi n$ evts:

SHMS prescale
pretrig: 332 k

$\Sigma e-\pi n$ evts:

COIN pretrig: ✓ k

- ☒ Data ok
☐ Junk

Comments:

LH2 @ 70 μ A $\rightarrow$ Beam crappy, tripped for 25 min

Run Number:

12119

- ☒ 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):

19:15

Stop time (RC GUI):

19:34

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

HMS prescale
pretrig: 105 k

$e-\pi n$ evts:

SHMS prescale
pretrig: 971 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' π)n Run Sheet

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

Use a separate sheet for each configuration.

Date: 21/9/17
yy mm dd

Initials: SJPK

HMS

SHMS

Configuration Name:

Heep Sing #13

Purpose:

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

E_{beam}: 9.203 GeV

I_{beam}: 70 μ A

Raster: ☒ On ☐ Off
Size: 2x2

Beam position and angle on target:

3H07A	X	Y
-0.50 mm		-0.00 mm
Nomin: -0.5		Nomin: 0.0
3H07C	X	Y
-0.81 mm		-0.29 mm
Nomin: -0.9		Nomin: -0.3

Q1	I-SET (from PSU) 613.268 A B-HALL 0.82040 T	I-SET (from PSU) 2110.07 A B-HALL 13.386 kg	HB
Q2	I-SET (from PSU) 487.767 A B-HALL -0.94686 T	I-SET (from PSU) 1317.90 A B-HALL -9.274 kg	Q1
Q3	I-SET (from PSU) 237.002 A B-HALL 0.47860 T	I-SET (from PSU) 2209.55 A B-HALL 20.688 kg	Q2
D	I-READ 1450.17 A B-NMR 1.28860 T	I-SET (from PSU) 1453.86 A B-HALL 14.004 kg	Q3
	If momentum increased: ☐ HMS cycled? ☒ SHMS cycled?	I-SET (from PSU) 1498.91 A B-NMR -14.543 kg	D

HMS

p: 4.707 θ (TV): 25.020
From GUI Nearest 0.005

SHMS

p: 6.265 θ (TV): 17.800
From GUI Nearest 0.005

Collimator:

HMS: Large ☒ Sieve ☐

SHMS: Collim ☒ Sieve ☐

Run Number:

12120

- ☒ 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):

19:40

Stop time (RC GUI):

20:02

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale
pretrig: 101 k

e- π n evts:

SHMS prescale
pretrig: 828 k

Σ e- π n evts:

COIN pretrig: k

☒ Data ok

☐ Junk

Comments:

LH2 @ 70MA

Run Number:

12121

- ☐ 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):

20:16

Stop time (RC GUI):

20:22

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale
pretrig: 10 k

e- π n evts:

SHMS prescale
pretrig: 275 k

Σ e- π n evts:

COIN pretrig: k

☒ Data ok

☐ Junk

Comments:

Dummy @ 40MA

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- π n evts:

SHMS prescale
pretrig: k

Σ e- π 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- π n evts:

SHMS prescale
pretrig: k

Σ e- π n evts:

COIN pretrig: k

☐ Data ok

☐ Junk

Comments:

p(e,e' π)n Run Sheet

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

Use a separate sheet for each configuration.

Date: 21/9/17
yy mm dd

Initials: SJDK

HMS

SHMS

Configuration Name: _____

Heep Sing #14

Purpose:

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

Raster: ☒ On ☐ Off
Size: 2x2mm

Beam position and angle on target:

3H07A	X	Y
-6.48mm	-0.02mm	
Nomin: -0.5	Nomin: 0.0	
3H07C	X	Y
-0.9 mm	-0.3 mm	
Nomin: -0.9	Nomin: -0.3	

HMS

p: 4.707 θ (TV): 25.020
From GUI Nearest 0.005

SHMS

p: 6.265 θ (TV): 18.650
From GUI Nearest 0.005

Collimator:

HMS: Large Sieve ☒

SHMS: Collim Sieve ☒

Q1	I-SET (from PSU) <u>613.268</u> A B-HALL <u>0.81470</u> T	I-SET (from PSU) <u>2110.07</u> A B-HALL <u>13.385</u> kg	HB
Q2	I-SET (from PSU) <u>487.707</u> A B-HALL <u>-6.94614</u> T	I-SET (from PSU) <u>1317.90</u> A B-HALL <u>-9.274</u> kg	Q1
Q3	I-SET (from PSU) <u>237.602</u> A B-HALL <u>0.47893</u> T	I-SET (from PSU) <u>2209.55</u> A B-HALL <u>20.688</u> kg	Q2
D	I-READ <u>1450.17</u> A B-NMR <u>1.28860</u> T	I-SET (from PSU) <u>1453.86</u> A B-HALL <u>14.602</u> kg	Q3
	If momentum increased: ☐ HMS cycled? ☒ SHMS cycled?		D
		<u>1998.91</u> A B-NMR <u>-14.543</u> kg	

Run Number:

12122

- ☐ 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 / 100

Start time (RC GUI):

20:26

Stop time (RC GUI):

20:32

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale
pretrig: 8 k

$e-\pi n$ evts:

SHMS prescale
pretrig: 139 k

$\Sigma e-\pi n$ evts:

COIN pretrig: 1 k

☒ Data ok

☐ Junk

Comments:

Dummy @ 40uA

Run Number:

12123

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

PS1: -1
PS2: 2
PS3: -1
PS4: 0
PS5: -1
PS6: -1
Mode10: cer / 100

Start time (RC GUI):

20:43

Stop time (RC GUI):

21:00

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale
pretrig: 90 k

$e-\pi n$ evts:

SHMS prescale
pretrig: 828 k

$\Sigma e-\pi n$ evts:

COIN pretrig: 1 k

☒ Data ok

☐ Junk

Comments:

LH2 @ 70uA

Run Number:

Comments:

- ☐ 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:

Comments:

- ☐ 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: 21/9/17
yy mm dd

Initials: SJOK

Configuration Name:

Heep Sing #15

E_{beam} : 9.203 GeV

I_{beam} : 70 μA

HMS

25.020

p : 4.707 $\theta(\text{TV})$: 14.405
From GUI Nearest 0.005

SHMS

p : 6.265 $\theta(\text{TV})$: 14.795
From GUI Nearest 0.005

Collimator:

HMS: Large ☒ Sieve ☐

SHMS: Collim ☒ Sieve ☐

Purpose:

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

☒ Other: Heep Single

Raster: ☒ On ☐ Off
Size: 2x2 mm

Beam position and angle on target:

3H07A	X	Y
	-0.49 mm	-0.00 mm
Nomin:	-0.5	Nomin: 0.0
3H07C	X	Y
	-0.81 mm	-0.30 mm
Nomin:	-0.9	Nomin: -0.3

HMS

SHMS

Q1	I-SET (from PSU) <u>613.268</u> A B-HALL <u>0.81660</u> T	I-SET (from PSU) <u>2110.07</u> A B-HALL <u>13.385</u> kG	HB
Q2	I-SET (from PSU) <u>487.707</u> A B-HALL <u>-0.94498</u> T	I-SET (from PSU) <u>1317.90</u> A B-HALL <u>-9.299</u> kG	Q1
Q3	I-SET (from PSU) <u>237.602</u> A B-HALL <u>0.47508</u> T	I-SET (from PSU) <u>2209.55</u> A B-HALL <u>20.688</u> kG	Q2
D	I-READ <u>1450.17</u> A B-NMR <u>1.2880</u> T	I-SET (from PSU) <u>1453.86</u> A B-HALL <u>14.003</u> kG	Q3
	If momentum increased: ☐ HMS cycled? ☒ SHMS cycled?	I-SET (from PSU) <u>1498.91</u> A B-NMR <u>-14.543</u> kG	D

Run Number:

12124

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

PS1: -1
PS2: 1
PS3: -1
PS4: 0
PS5: -1
PS6: -1
Mode10: cer / 100

Start time (RC GUI):

21:04

Stop time (RC GUI):

21:36

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

HMS prescale
pretrig: 159 k

$e-\pi n$ evts:

SHMS prescale
pretrig: 1258 k

$\Sigma e-\pi n$ evts:

COIN
pretrig: k

☒ Data ok

☐ Junk

Comments:

LH2 @ 70 μA

Run Number:

12125

- ☐ 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 / 100

Start time (RC GUI):

21:44

Stop time (RC GUI):

21:50

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

HMS prescale
pretrig: 10 k

$e-\pi n$ evts:

SHMS prescale
pretrig: 104 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 / fad

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 / fad

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: 21/9/17
yy mm dd

Initials: SJOK

HMS

SHMS

Configuration Name:

Lumi Scan #1
(p20)

Purpose:

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

E_{beam}: 9.203 GeV

I_{beam}:  μA

Raster: ☒ On ☐ Off
Size: 2x2

HMS

p: ± 4.10 $\theta(TV)$: 12.505
From GUI Nearest 0.005

Beam position and angle on target:

3H07A	X	Y
-0.50 mm	-0.00 mm	
Nomin: -0.5	Nomin: 0.0	
3H07C	X	Y
-0.89 mm	-0.30 mm	
Nomin: -0.9	Nomin: -0.3	

SHMS

p: ± 5.27 $\theta(TV)$: 7.505
From GUI Nearest 0.005

Collimator:

HMS: Large ☒ Sieve ☐

SHMS: Collim ☒ Sieve ☐

Q1	I-SET (from PSU) 534.165 A B-HALL 0.76790 T	I-SET (from PSU) 1762.7 A B-HALL 11.180 KG	HB
Q2	I-SET (from PSU) 424.745 A B-HALL -0.82238 T	I-SET (from PSU) 1106.54 A B-HALL -7.801 KG	Q1
Q3	I-SET (from PSU) 206.4940 A B-HALL 0.41759 T	I-SET (from PSU) 1858.63 A B-HALL 17.426 KG	Q2
D	I-READ 1256.9 A B-NMR 1.12243 T	I-SET (from PSU) 1222.96 A B-HALL 11.792 KG	Q3
	If momentum increased: ☐ HMS cycled? ☐ SHMS cycled?	I-SET (from PSU) 1681.45 A B-NMR -12.253 KG	D

Run Number:

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

PS1: -1
PS2: 11
PS3: -1
PS4: 7
PS5: -1
PS6: -1
Mode10: cer / ~~100~~

Start time (RC GUI):

22:26

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale
pretrig: 740 k

$e-\pi n$ evts:

SHMS prescale
pretrig: 546 k

$\Sigma e-\pi n$ evts:

COIN pretrig: k

☒ Data ok

☐ Junk

Comments:

LH2 @ 70kA $\rightarrow$ End run failed

Run Number:

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

PS1: -1
PS2: 11
PS3: -1
PS4: 7
PS5: -1
PS6: -1
Mode10: cer / ~~100~~

Start time (RC GUI):

22:41

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale
pretrig: 611 k

$e-\pi n$ evts:

SHMS prescale
pretrig: 537 k

$\Sigma e-\pi n$ evts:

COIN pretrig: k

☒ Data ok

☐ Junk

Comments:

12127 $\rightarrow$ JUNK (COIN)

LH2 @ 55kA

Run Number:

- ☒ 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 / ~~100~~

Start time (RC GUI):

22:54

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale
pretrig: 429 k

$e-\pi n$ evts:

SHMS prescale
pretrig: 753 k

$\Sigma e-\pi n$ evts:

COIN pretrig: k

☒ Data ok

☐ Junk

Comments:

LH2 @ 40kA

Run Number:

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

PS1: -1
PS2: 10
PS3: -1
PS4: 6
PS5: -1
PS6: -1
Mode10: cer / ~~100~~

Start time (RC GUI):

23:06

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale
pretrig: 539 k

$e-\pi n$ evts:

SHMS prescale
pretrig: 492 k

$\Sigma e-\pi n$ evts:

COIN pretrig: k

☒ Data ok

☐ Junk

Comments:

LH2 @ 25kA

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

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

Date: 21 / 9 / 17
yy mm dd

Initials: SJK

Continuation of Configuration:
Lumi Scan #1
(P20)

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

Run Number: 12131	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: -1 PS2: 10 PS3: -1 PS4: 6 PS5: -1 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 23:18 Stop time (RC GUI): 23:28	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale: 263 k pretrig: _____ $e-\pi n$ evts: _____	SHMS prescale: 327 k pretrig: _____ $\Sigma e-\pi n$ evts: _____	COIN pretrig: _____ k ☒ Data ok ☒ Junk
----------------------	--	---	---	---	--	--	--

LH2 @ 12 μ A $\rightarrow$ PS may be wrong

Run Number: 12132	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: -1 PS2: 10 PS3: -1 PS4: 6 PS5: -1 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 23:29 Stop time (RC GUI): 23:42	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale: 380 k pretrig: _____ $e-\pi n$ evts: _____	SHMS prescale: 472 k pretrig: _____ $\Sigma e-\pi n$ evts: _____	COIN pretrig: _____ k ☒ Data ok ☐ Junk
----------------------	--	---	---	---	--	--	---

LH2 @ 18 μ A

Run Number: 12133	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: -1 PS2: 10 PS3: -1 PS4: 6 PS5: -1 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 23:43 Stop time (RC GUI): 23:55	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale: 177 k pretrig: _____ $e-\pi n$ evts: _____	SHMS prescale: 217 k pretrig: _____ $\Sigma e-\pi n$ evts: _____	COIN pretrig: _____ k ☒ Data ok ☐ Junk
----------------------	--	---	---	---	--	--	---

LH2 @ 8 μ A

Run Number: 12134	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: -1 PS2: 10 PS3: -1 PS4: 6 PS5: -1 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 23:5 Stop time (RC GUI): _____ 23:55	☒ Settings Verified? ☒ HV OK? ☐ 50k OK?	HMS prescale: 411 k pretrig: _____ $e-\pi n$ evts: _____	SHMS prescale: 557 k pretrig: _____ $\Sigma e-\pi n$ evts: _____	COIN pretrig: _____ k ☐ Data ok ☒ Junk
----------------------	--	---	--	--	--	--	---

LH2 @ 5 μ A JUNK PS too low

Run Number: 12135	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: -1 PS2: 8 PS3: -1 PS4: 4 PS5: -1 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 00:00 Stop time (RC GUI): _____ 23:55	☒ Settings Verified? ☒ HV OK? ☐ 50k OK?	HMS prescale: 411 k pretrig: _____ $e-\pi n$ evts: _____	SHMS prescale: 557 k pretrig: _____ $\Sigma e-\pi n$ evts: _____	COIN pretrig: _____ k ☐ Data ok ☐ Junk
----------------------	--	--	---	--	--	--	--

LH2 @ 5 μ A

Run Number: 12136	☐ 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): _____ 23:55	☐ Settings Verified? ☐ HV OK? ☐ 50k OK?	HMS prescale: _____ k pretrig: _____ $e-\pi n$ evts: _____	SHMS prescale: _____ k pretrig: _____ $\Sigma e-\pi n$ evts: _____	COIN pretrig: _____ k ☐ Data ok ☒ Junk
----------------------	---	--	---	--	--	--	---

bad prescale

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

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

Date: 21/09/18
yy mm dd

Initials: CAM

Continuation of Configuration:

Lumiscan #1

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

536

Run Number: <u>12137</u>	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: <u>-1</u> PS2: <u>7</u> PS3: <u>-1</u> PS4: <u>3</u> PS5: <u>-1</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): <u>14:20</u> Stop time (RC GUI): <u>25:28</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale <u>477</u> k pretrig: _____ $e-\pi n$ evts: _____	SHMS prescale <u>442</u> k pretrig: _____ $\Sigma e-\pi n$ evts: _____	COIN pretrig: _____ k ☒ Data ok ☐ Junk
-----------------------------	--	--	---	---	---	---	---

Comments:

3 μ A

SHMS Hcer peds not good.

Run Number: <u>12138</u>	☐ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____ Mode10: cer / fadc	Start time (RC GUI): _____ Stop time (RC GUI): _____	☐ Settings Verified? ☐ HV OK? ☐ 50k OK?	HMS prescale _____ k pretrig: _____ $e-\pi n$ evts: _____	SHMS prescale _____ k pretrig: _____ $\Sigma e-\pi n$ evts: _____	COIN pretrig: _____ k ☐ Data ok ☒ Junk
-----------------------------	---	--	---	--	--	--	---

Comments:

Bad run, No pre-scale gui

Run Number: <u>12139</u>	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: <u>-1</u> PS2: <u>9</u> PS3: <u>-1</u> PS4: <u>5</u> PS5: <u>-1</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): <u>30:25</u> Stop time (RC GUI): _____	☐ Settings Verified? ☒ HV OK? ☐ 50k OK?	HMS prescale <u>562</u> k pretrig: _____ $e-\pi n$ evts: _____	SHMS prescale <u>724</u> k pretrig: _____ $\Sigma e-\pi n$ evts: _____	COIN pretrig: _____ k ☐ Data ok ☒ Junk
-----------------------------	--	--	--	---	---	---	---

Comments:

12 μ A re-scan, Bad Run DAG needed reset

Run Number: <u>12140</u>	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: <u>-1</u> PS2: <u>9</u> PS3: <u>-1</u> PS4: <u>5</u> PS5: <u>-1</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): <u>39:50</u> Stop time (RC GUI): <u>50:28</u>	☒ Settings Verified? ☒ HV OK? ☐ 50k OK?	HMS prescale <u>562</u> k pretrig: _____ $e-\pi n$ evts: _____	SHMS prescale <u>538</u> k pretrig: _____ $\Sigma e-\pi n$ evts: _____	COIN pretrig: _____ k ☐ Data ok ☐ Junk
-----------------------------	--	--	---	--	---	---	--

Comments:

Good 12 μ A Check that it was not 70 μ A (at end)

Run Number: <u>12141</u>	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: <u>-1</u> PS2: <u>11</u> PS3: <u>-1</u> PS4: <u>7</u> PS5: <u>-1</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): <u>56:33</u> Stop time (RC GUI): <u>1:03</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale <u>477</u> k pretrig: _____ $e-\pi n$ evts: _____	SHMS prescale <u>442</u> k pretrig: _____ $\Sigma e-\pi n$ evts: _____	COIN pretrig: _____ k ☒ Data ok ☐ Junk
-----------------------------	--	---	--	---	---	---	---

Comments:

70 μ A ~5 mins 70 μ A, then beam down

Run Number: <u>12142</u>	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: <u>-1</u> PS2: <u>11</u> PS3: <u>-1</u> PS4: <u>7</u> PS5: <u>-1</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): <u>1:08:30</u> <u>56:33</u> Stop time (RC GUI): _____	☐ Settings Verified? ☐ HV OK? ☐ 50k OK?	HMS prescale <u>477</u> k pretrig: _____ $e-\pi n$ evts: _____	SHMS prescale <u>442</u> k pretrig: _____ $\Sigma e-\pi n$ evts: _____	COIN pretrig: _____ k ☒ Data ok ☐ Junk
-----------------------------	--	---	--	--	---	---	---

Comments:

70 μ A

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

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

Date: 21/07/18
yy mm dd

Initials: CAM

Continuation of Configuration:

luminiscan #1

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

Run Number: <u>12143</u>	☐ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☒ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____ Mode10: cer / fadc	Start time (RC GUI): _____ Stop time (RC GUI): _____	☐ Settings Verified? ☐ HV OK? ☐ 50k OK?	HMS prescale pretrig: _____ k $e-\pi n$ evts: _____	SHMS prescale pretrig: _____ k $\Sigma e-\pi n$ evts: _____	COIN pretrig: _____ k ☐ Data ok ☒ Junk
-----------------------------	--	--	---	--	--	--	---

C (0.5%) , 70 μ A JUNK. PS GUI / SCALERS froze

Run Number: <u>12144</u>	☐ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☒ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: <u>-1</u> PS2: <u>9</u> PS3: <u>-1</u> PS4: <u>5</u> PS5: <u>-1</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): <u>1:33:47</u> Stop time (RC GUI): <u>1:58:55</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: <u>1146</u> k $e-\pi n$ evts: <u>/</u>	SHMS prescale pretrig: <u>1348</u> k $\Sigma e-\pi n$ evts: <u>/</u>	COIN pretrig: <u>/</u> k ☐ Data ok ☐ Junk
-----------------------------	--	--	---	---	---	---	---

C (0.5%) 70 μ A

Run Number: <u>12145</u>	☐ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☒ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: <u>-1</u> PS2: <u>9</u> PS3: <u>-1</u> PS4: <u>5</u> PS5: <u>-1</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): <u>2:00:55</u> Stop time (RC GUI): <u>2:25:39</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: <u>898</u> k $e-\pi n$ evts: <u>/</u>	SHMS prescale pretrig: <u>1142</u> k $\Sigma e-\pi n$ evts: <u>/</u>	COIN pretrig: <u>/</u> k ☒ Data ok ☐ Junk
-----------------------------	--	--	---	---	--	---	--

55 μ A

Run Number: <u>12146</u>	☐ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____ Mode10: cer / fadc	Start time (RC GUI): _____ Stop time (RC GUI): _____	☐ Settings Verified? ☐ HV OK? ☐ 50k OK?	HMS prescale pretrig: _____ k $e-\pi n$ evts: _____	SHMS prescale pretrig: _____ k $\Sigma e-\pi n$ evts: _____	COIN pretrig: _____ k ☐ Data ok ☒ Junk
-----------------------------	---	--	---	--	--	--	---

JUNK , Didn't save PS.

Run Number: <u>12147</u>	☐ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☒ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: <u>-1</u> PS2: <u>8</u> PS3: <u>-1</u> PS4: <u>4</u> PS5: <u>-1</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): <u>2:28</u> Stop time (RC GUI): <u>2:50</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: <u>1268</u> k $e-\pi n$ evts: <u>/</u>	SHMS prescale pretrig: <u>1402</u> k $\Sigma e-\pi n$ evts: <u>/</u>	COIN pretrig: <u>/</u> k ☒ Data ok ☐ Junk
-----------------------------	--	--	---	---	---	---	--

40 μ A

Run Number: <u>12148</u>	☐ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☒ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: <u>-1</u> PS2: <u>7</u> PS3: <u>-1</u> PS4: <u>3</u> PS5: <u>-1</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): <u>2:52</u> Stop time (RC GUI): <u>3:12</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: <u>1367</u> k $e-\pi n$ evts: <u>/</u>	SHMS prescale pretrig: <u>1500</u> k $\Sigma e-\pi n$ evts: <u>/</u>	COIN pretrig: <u>/</u> k ☒ Data ok ☐ Junk
-----------------------------	--	--	---	---	---	---	--

25 μ A

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

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

Date: 21/09/18
yy mm dd

Initials: NH

Continuation of Configuration:

Lumiscan #1

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

Run Number: 12149	☐ 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
----------------------	--	--	---	--	--	--	---

ROC 6 disconnected reboot ROC6

Run Number: 12150	☐ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☒ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: -1 PS2: 7 PS3: -1 PS4: 3 PS5: -1 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 3:20 Stop time (RC GUI): 3:41	☒ Settings Verified? ☒ HV OK? ☐ 50k OK?	HMS prescale pretrig: 1008 k $e-\pi n$ evts: _____	SHMS prescale pretrig: 1105 k $\Sigma e-\pi n$ evts: _____	COIN pretrig: _____ k ☒ Data ok ☐ Junk
----------------------	--	--	---	--	---	---	---

18 μ A

Run Number: 12151	☐ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☒ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: -1 PS2: 6 PS3: -1 PS4: 3 PS5: -1 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 3:42 Stop time (RC GUI): 4:04	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 790 k $e-\pi n$ evts: _____	SHMS prescale pretrig: 1285 k $\Sigma e-\pi n$ evts: _____	COIN pretrig: _____ k ☒ Data ok ☐ Junk
----------------------	--	--	---	---	--	---	---

12 μ A

Run Number: 12152	☐ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☒ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: -1 PS2: 6 PS3: -1 PS4: 1 PS5: -1 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 4:06 Stop time (RC GUI): 4:28	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 1160 k $e-\pi n$ evts: _____	SHMS prescale pretrig: 1200 k $\Sigma e-\pi n$ evts: _____	COIN pretrig: _____ k ☒ Data ok ☐ Junk
----------------------	--	--	---	---	---	---	---

8 μ A

Run Number: 12153	☐ 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): 4:29 Stop time (RC GUI): 4:50	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 1418 k $e-\pi n$ evts: _____	SHMS prescale pretrig: 1492 k $\Sigma e-\pi n$ evts: _____	COIN pretrig: _____ k ☒ Data ok ☐ Junk
----------------------	--	--	---	---	---	---	---

5 μ A

Run Number: 12154	☐ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☒ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: -1 PS2: 4 PS3: -1 PS4: 0 PS5: -1 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 04:52 Stop time (RC GUI): 05:15	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: 829 k $e-\pi n$ evts: _____	SHMS prescale pretrig: 1642 k $\Sigma e-\pi n$ evts: _____	COIN pretrig: _____ k ☒ Data ok ☐ Junk
----------------------	--	--	---	---	--	---	---

3 μ A 2.5 mins of no beam towards end of run

p(e,e' π)n Run Sheet

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

Date: 21/09/18
yy mm dd

Initials: CAM

Continuation of Configuration:

Luminosity Scan #1

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

Run Number: <u>12155</u>	☐ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____ Mode10: cer / fadc	Start time (RC GUI): _____ Stop time (RC GUI): _____	☐ Settings Verified? ☐ HV OK? ☐ 50k OK?	HMS prescale pretrig: _____ k $e-\pi n$ evts: _____	SHMS prescale pretrig: _____ k $\Sigma e-\pi n$ evts: _____	COIN pretrig: _____ k ☐ Data ok ☒ Junk
-----------------------------	---	--	---	--	--	--	---

Comments:

Junk No scalers or PS GUI...

Run Number: <u>12156</u>	☐ LH2 10cm ☐ LD2 10cm ☒ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: <u>-1</u> PS2: <u>5</u> PS3: <u>-1</u> PS4: <u>5</u> PS5: <u>-1</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): <u>05:25</u> Stop time (RC GUI): <u>05:35</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: <u>611</u> k $e-\pi n$ evts: _____	SHMS prescale pretrig: <u>779</u> k $\Sigma e-\pi n$ evts: _____	COIN pretrig: _____ k ☒ Data ok ☐ Junk
-----------------------------	--	--	---	---	---	---	---

Comments:

40 μ A on AL Dummy.

Run Number: <u>12157</u>	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____ Mode10: cer / fadc	Start time (RC GUI): 05:25 Stop time (RC GUI): _____	☒ Settings Verified? ☒ HV OK? ☐ 50k OK?	HMS prescale pretrig: <u>471</u> k $e-\pi n$ evts: _____	SHMS prescale pretrig: <u>673</u> k $\Sigma e-\pi n$ evts: _____	COIN pretrig: _____ k ☐ Data ok ☒ Junk
-----------------------------	--	--	--	--	---	---	---

Comments:

JUNK PS GUI Broke

Run Number: <u>12158</u>	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: <u>-1</u> PS2: <u>11</u> PS3: <u>-1</u> PS4: <u>8</u> PS5: <u>-1</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): <u>5:47</u> Stop time (RC GUI): <u>6:01</u>	☒ 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:

LD2, 40 μ A

Run Number: <u>12159</u>	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: <u>-1</u> PS2: <u>11</u> PS3: <u>-1</u> PS4: <u>7</u> PS5: <u>-1</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): <u>6:02</u> Stop time (RC GUI): <u>6:13</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: <u>608</u> k $e-\pi n$ evts: _____	SHMS prescale pretrig: <u>719</u> k $\Sigma e-\pi n$ evts: _____	COIN pretrig: _____ k ☒ Data ok ☐ Junk
-----------------------------	--	---	---	---	---	---	---

Comments:

LD2 25 μ A

Run Number: <u>12160</u>	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: <u>-1</u> PS2: <u>10</u> PS3: <u>-1</u> PS4: <u>6</u> PS5: <u>-1</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): <u>6:14</u> Stop time (RC GUI): <u>6:24</u>	☒ 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:

LD2 18 μ A

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

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

Date: 21/09/18
yy mm dd

Initials: CAM

Continuation of Configuration:

Luminosity Scan #1

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

Run Number: <u>12161</u>	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: <u>-1</u> PS2: <u>10</u> PS3: <u>-1</u> PS4: <u>6</u> PS5: <u>-1</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): <u>6:25</u> Stop time (RC GUI): _____	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: _____ k $e-\pi n$ evts: <u>/</u>	SHMS prescale pretrig: _____ k $\Sigma e-\pi n$ evts: <u>/</u>	COIN pretrig: _____ k ☒ Data ok ☐ Junk
Comments: <u>12 μA</u>							

Run Number: <u>12162</u>	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: <u>-1</u> PS2: <u>9</u> PS3: <u>-1</u> PS4: <u>5</u> PS5: <u>-1</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): <u>6:38</u> Stop time (RC GUI): <u>6:48</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: _____ k $e-\pi n$ evts: <u>/</u>	SHMS prescale pretrig: _____ k $\Sigma e-\pi n$ evts: <u>/</u>	COIN pretrig: _____ k ☒ Data ok ☐ Junk
Comments: <u>8 μA</u>							

Run Number: <u>12163</u>	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: <u>-1</u> PS2: <u>8</u> PS3: <u>-1</u> PS4: <u>5</u> PS5: <u>-1</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): <u>6:50</u> Stop time (RC GUI): _____	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: _____ k $e-\pi n$ evts: <u>/</u>	SHMS prescale pretrig: _____ k $\Sigma e-\pi n$ evts: <u>/</u>	COIN pretrig: _____ k ☐ Data ok ☒ Junk
Comments: <u>5 μA</u> <u>Okay, but lost beam not much data.</u>							

Run Number: <u>12164</u>	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: <u>-1</u> PS2: <u>8</u> PS3: <u>-1</u> PS4: <u>5</u> PS5: <u>-1</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): <u>7:03</u> Stop time (RC GUI): <u>7:14</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: _____ k $e-\pi n$ evts: <u>/</u>	SHMS prescale pretrig: _____ k $\Sigma e-\pi n$ evts: <u>/</u>	COIN pretrig: _____ k ☒ Data ok ☐ Junk
Comments: <u>5 μA</u>							

Run Number: <u>12165</u>	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: <u>-1</u> PS2: <u>87</u> PS3: <u>-1</u> PS4: <u>54</u> PS5: <u>-1</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): <u>7:03</u> Stop time (RC GUI): <u>7:14</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: _____ k $e-\pi n$ evts: <u>/</u>	SHMS prescale pretrig: _____ k $\Sigma e-\pi n$ evts: <u>/</u>	COIN pretrig: _____ k ☒ Data ok ☒ Junk
Comments: <u>3 μA</u> <u>JUNK - PS</u>							

Run Number: <u>12166</u>	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: <u>-1</u> PS2: <u>8</u> PS3: <u>-1</u> PS4: <u>4</u> PS5: <u>-1</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): <u>07:18</u> Stop time (RC GUI): <u>07:28</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: _____ k $e-\pi n$ evts: <u>/</u>	SHMS prescale pretrig: _____ k $\Sigma e-\pi n$ evts: <u>/</u>	COIN pretrig: _____ k ☒ Data ok ☐ Junk
Comments: <u>3 μA</u>							

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

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

Use a separate sheet for each configuration.

Date: 21/09/18
yy mm dd

Initials: NH

HMS

SHMS

Configuration Name:

Luminosity Scan #2

Purpose:

- ☐ Production
☒ Test (e.g. DAQ, Detector)
☐ Optics (SHMS / HMS)
☒ Other: Lumi Scan 2

E_{beam}: 9157 GeV

I_{beam}: μ A

Raster: ☒ On ☐ Off
Size: 2x2

HMS

p: +/- 4.160 θ (TV): 13.05
From GUI Nearest 0.005

SHMS

p: +/- 5.27 θ (TV): 9.00
From GUI Nearest 0.005

Beam position and angle on target:

3H07A	X	Y
-0.9 mm		-0.0 mm
Nomin:		Nomin:
3H07C	X	Y
-0.9 mm		0.3 mm
Nomin:		Nomin:

Q1	I-SET (from PSU) 534.165 A B-HALL	I-SET (from PSU) 1762.7 A B-HALL	HB
	0.71110 T	11.181 kg	
Q2	I-SET (from PSU) 424.745 A B-HALL	I-SET (from PSU) 1106.54 A B-HALL	Q1
	-0.81917 T	-7.801 kg	
Q3	I-SET (from PSU) 206.494 A B-HALL	I-SET (from PSU) 1858.63 A B-HALL	Q2
	0.41264 T	17.426 kg	
D	I-READ 1259.18 A B-NMR	I-SET (from PSU) 1222.96 A B-HALL	Q3
	1.12242 T	11.795 kg	
	If momentum increased: ☐ HMS cycled? ☐ SHMS cycled?	I-SET (from PSU) 1681.45 A B-NMR	D
		-12.259 kg	

Run Number:

12167

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

PS1: -1
PS2: 10
PS3: -1
PS4: 8
PS5: -1
PS6: -1
Mode10: cer / fadc

Start time (RC GUI):

7:43

Stop time (RC GUI):

7:54

- ☒ 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:

55 μ A /

Run Number:

12168

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

PS1: -1
PS2: 10
PS3: -1
PS4: 8
PS5: -1
PS6: -1
Mode10: cer / fadc

Start time (RC GUI):

7:55

Stop time (RC GUI):

8:05

- ☒ 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:

40 μ A

Run Number:

12169

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

PS1: -1
PS2: 10
PS3: -1
PS4: 8
PS5: -1
PS6: -1
Mode10: cer / fadc

Start time (RC GUI):

8:06

Stop time (RC GUI):

8:08

- ☒ 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:

40 μ A

Did not change current, Junk

Run Number:

12170

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

PS1: -1
PS2: 10
PS3: 8
PS4: 8
PS5: -1
PS6: -1
Mode10: cer / fadc

Start time (RC GUI):

8:18

Stop time (RC GUI):

8:29

- ☒ 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:

25 μ A

p(e,e' π)n Run Sheet

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

Date: 21, 9, 18
yy mm dd

Initials: P.S.

Continuation of Configuration:

Luminosity Scan #2

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

Run Number: <u>12171</u>	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: <u>-1</u> PS2: <u>10</u> PS3: <u>-1</u> PS4: <u>8</u> PS5: <u>-1</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): <u>08:34</u> Stop time (RC GUI): <u>08:49</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: <u>/</u> k $e-\pi n$ evts: <u>/</u>	SHMS prescale pretrig: <u>/</u> k $\Sigma e-\pi n$ evts: <u>/</u>	COIN pretrig: <u>/</u> k ☒ Data ok ☐ Junk
-----------------------------	--	---	---	---	---	---	---

Comments:

10 μ A

Run Number: <u>12172</u>	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: <u>-1</u> PS2: <u>10</u> PS3: <u>-1</u> PS4: <u>8</u> PS5: <u>-1</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): <u>08:45</u> Stop time (RC GUI): <u>08:55</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: <u>/</u> k $e-\pi n$ evts: <u>/</u>	SHMS prescale pretrig: <u>/</u> k $\Sigma e-\pi n$ evts: <u>/</u>	COIN pretrig: <u>/</u> k ☒ Data ok ☐ Junk
-----------------------------	--	---	---	---	---	---	---

Comments:

18 μ A

Run Number: <u>12173</u>	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: <u>-1</u> PS2: <u>10</u> PS3: <u>-1</u> PS4: <u>7</u> PS5: <u>-1</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): <u>09:05</u> Stop time (RC GUI): <u>09:10</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: <u>/</u> k $e-\pi n$ evts: <u>/</u>	SHMS prescale pretrig: <u>/</u> k $\Sigma e-\pi n$ evts: <u>/</u>	COIN pretrig: <u>/</u> k ☒ Data ok ☒ Junk
-----------------------------	--	---	---	---	---	---	--

Comments:

5 μ A

Messing with Prescale GUI. Acquired 5 mins only

Run Number: <u>12174</u>	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: <u>-1</u> PS2: <u>8</u> PS3: <u>-1</u> PS4: <u>5</u> PS5: <u>-1</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): <u>09:12</u> Stop time (RC GUI): <u>09:23</u>	☒ Settings Verified? ☒ HV OK? ☐ 50k OK?	HMS prescale pretrig: <u>/</u> k $e-\pi n$ evts: <u>/</u>	SHMS prescale pretrig: <u>/</u> k $\Sigma e-\pi n$ evts: <u>/</u>	COIN pretrig: <u>/</u> k ☒ Data ok ☐ Junk
-----------------------------	--	--	---	--	---	---	---

Comments:

5 μ A

set ps2 = 8, ps4 = 5

Run Number: <u>12175</u>	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: <u>-1</u> PS2: <u>9</u> PS3: <u>-1</u> PS4: <u>6</u> PS5: <u>-1</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): <u>9:25</u> Stop time (RC GUI): <u>9:35</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: <u>/</u> k $e-\pi n$ evts: <u>/</u>	SHMS prescale pretrig: <u>/</u> k $\Sigma e-\pi n$ evts: <u>/</u>	COIN pretrig: <u>/</u> k ☒ Data ok ☐ Junk
-----------------------------	--	--	---	---	---	---	---

Comments:

18 μ A

set ps2 = 9, ps4 = 6

Run Number: <u>12176</u>	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: <u>-1</u> PS2: <u>11</u> PS3: <u>-1</u> PS4: <u>8</u> PS5: <u>-1</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): <u>09:38</u> Stop time (RC GUI): <u>09:49</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: <u>/</u> k $e-\pi n$ evts: <u>/</u>	SHMS prescale pretrig: <u>/</u> k $\Sigma e-\pi n$ evts: <u>/</u>	COIN pretrig: <u>/</u> k ☐ Data ok ☐ Junk
-----------------------------	--	---	---	---	---	---	--

Comments:

70 μ A

set ps2 = 11, ps4 = 8

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

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

Date: 21 / 9 / 18
yy mm dd

Initials: P.S.

Continuation of Configuration:

Luminosity Scan #2

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

Run Number: 12177	☐ 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): 10:02 Stop time (RC GUI): 10:03	☒ 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
----------------------	--	--	---	--	--	--	---

Set wrong prescale values

Run Number: 12178	☐ LH2 10cm ☐ LD2 10cm ☒ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm	PS1: -1 PS2: 8 PS3: -1 PS4: 5 PS5: -1 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 10:04 Stop time (RC GUI): 10:16	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: k $e-\pi n$ evts:	SHMS prescale pretrig: k $\Sigma e-\pi n$ evts:	☒ Data ok ☐ Junk
----------------------	--	--	---	---	--	--	--

40 μ A

Run Number: 12179	☐ LH2 10cm ☐ LD2 10cm ☒ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm	PS1: -1 PS2: 8 PS3: -1 PS4: 5 PS5: -1 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 10:17 Stop time (RC GUI): 10:27	☒ Settings Verified? ☒ HV OK? ☐ 50k OK?	HMS prescale pretrig: k $e-\pi n$ evts:	SHMS prescale pretrig: k $\Sigma e-\pi n$ evts:	☒ Data ok ☐ Junk
----------------------	--	--	---	--	--	--	--

40 μ A

Run Number: 12180	☐ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☒ C 0.5% r.l. ☐ Optics ____cm	PS1: -1 PS2: 8 PS3: -1 PS4: 5 PS5: -1 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 15:13 Stop time (RC GUI): 15:15	☐ Settings Verified? ☐ HV OK? ☐ 50k OK?	HMS prescale pretrig: k $e-\pi n$ evts:	SHMS prescale pretrig: k $\Sigma e-\pi n$ evts:	☐ Data ok ☒ Junk
----------------------	--	--	---	--	--	--	--

Test CODA

Run Number: 2181	☐ 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): 15:15 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:	☐ Data ok ☒ Junk
---------------------	---	--	--	--	--	--	--

Test CODA

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:	☐ Data ok ☐ Junk
-------------	---	--	---	--	--	--	---

Comments:

p(e,e' π)n Run Sheet

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

Use a separate sheet for each configuration.

Date: 21/04/17
yy mm dd

Initials: Jn

HMS

SHMS (Same)

Configuration Name:

Luminosity Scan #2 cont.
CHMS Cycled

Purpose:

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

Raster: ☒ On ☐ Off
Size: 2x2

Beam position and angle on target:

3H07A	X	Y
-0.50 mm		0.00 mm
Nomin: -0.5		Nomin: 0.0
3H07C	X	Y
-0.89 mm		-0.24 mm
Nomin: -0.9		Nomin: -0.3

HMS

p: +0 -4.1 θ (TV): 13.005
From GUI Nearest 0.005

SHMS

p: +0 -5.27 θ (TV): 8.995
From GUI Nearest 0.005

Collimator:

HMS: Large ☒ Sieve ☐

SHMS: Collim ☒ Sieve ☐

Q1	I-SET (from PSU) 534.165 A B-HALL 0.71500 T	I-SET (from PSU) A B-HALL kg	HB
Q2	I-SET (from PSU) 424.745 A B-HALL -0.82206 T	I-SET (from PSU) A B-HALL kg	Q1
Q3	I-SET (from PSU) 206.494 A B-HALL 0.4122 T	I-SET (from PSU) A B-HALL kg	Q2
D	I-READ 1257.2 A B-NMR 1.1224400 T	I-SET (from PSU) A B-HALL kg	Q3
	If momentum increased: ☒ HMS cycled? ☐ SHMS cycled?	I-SET (from PSU) A B-NMR kg	D

Run Number:

12181

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

PS1: -1
PS2: 8
PS3: -1
PS4: 5
PS5: -1
PS6: -1
Mode10: cer / fadc

Start time (RC GUI):

16:09:30

Stop time (RC GUI):

16:30:30

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

HMS prescale
pretrig: 902 k

$e-\pi$ evts:

SHMS prescale
pretrig: 913 k

$\Sigma e-\pi$ evts:

COIN
pretrig: k

- ☒ Data ok
☐ Junk

Comments:

C 0.5%

70 μ A

Code ending issue

Run Number:

12182

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

PS1: -1
PS2: 8
PS3: -1
PS4: 5
PS5: -1
PS6: -1
Mode10: cer / fadc

Start time (RC GUI):

16:36

Stop time (RC GUI):

16:37

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

HMS prescale
pretrig: k

$e-\pi$ evts:

SHMS prescale
pretrig: k

$\Sigma e-\pi$ evts:

COIN
pretrig: k

- ☐ Data ok
☒ Junk

Comments:

Code crash

Run Number:

12183

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

PS1: -1
PS2: 8
PS3: -1
PS4: 5
PS5: -1
PS6: -1
Mode10: cer / fadc

Start time (RC GUI):

16:37

Stop time (RC GUI):

16:38

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

HMS prescale
pretrig: k

$e-\pi$ evts:

SHMS prescale
pretrig: k

$\Sigma e-\pi$ evts:

COIN
pretrig: k

- ☐ Data ok
☒ Junk

Comments:

Code P.S. off

Run Number:

12184

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

PS1: -1
PS2: 3
PS3: 4
PS4: 4
PS5: 7
PS6: 7
Mode10: cer / fadc

Start time (RC GUI):

16:38:56

Stop time (RC GUI):

17:01:04

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

HMS prescale
pretrig: 1330 k

$e-\pi$ evts:

SHMS prescale
pretrig: 1406 k

$\Sigma e-\pi$ evts:

COIN
pretrig: k

- ☒ Data ok
☐ Junk

Comments:

55 μ A

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

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

Date: 21/09/18
yy mm dd

Initials: *jm*

Continuation of Configuration:

Luminosity Scan #2

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

Run Number: 12185	☐ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☒ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: 4 PS2: 3 PS3: 4 PS4: -1 PS5: -1 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 17:02:38 Stop time (RC GUI): 17:22:48	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale 990 k SHMS prescale 1015 k COIN pretrig: ____ k e- π n evts: _____ Σ e- π n evts: _____	☒ Data ok ☐ Junk
Comments: 40 μA						

Run Number: 12186	☐ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☒ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: -1 PS2: 6 PS3: -1 PS4: 3 PS5: -1 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 17:24:24 Stop time (RC GUI): 17:44:38	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale 113 k SHMS prescale 1240 k COIN pretrig: ____ k e- π n evts: _____ Σ e- π n evts: _____	☒ Data ok ☐ Junk
Comments: 25 μA						

Run Number: 12187	☐ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☒ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: -1 PS2: 6 PS3: -1 PS4: 2 PS5: -1 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 17:44:38 17:46:23 Stop time (RC GUI): 18:06:26	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale 1333 k SHMS prescale 928 k COIN pretrig: ____ k e- π n evts: _____ Σ e- π n evts: _____	☒ Data ok ☐ Junk
Comments: 18 μA Beam went off target for ~1min; Code crashed @ end						

Run Number: 12188	☐ 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 COIN pretrig: ____ k e- π n evts: _____ Σ e- π n evts: _____	☐ Data ok ☒ Junk
Comments: Code Crash						

Run Number: 12189	☐ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☒ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: -1 PS2: 4 PS3: -1 PS4: 1 PS5: -1 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 18:12:24 Stop time (RC GUI): 18:32:40	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale 744 k SHMS prescale 1005 k COIN pretrig: ____ k e- π n evts: _____ Σ e- π n evts: _____	☒ Data ok ☐ Junk
Comments: 10 μA						

Run Number: 12190	☐ 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): 18:34:36 Stop time (RC GUI): 18:55:47	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale 1116 k SHMS prescale 1702 k COIN pretrig: ____ k e- π n evts: _____ Σ e- π n evts: _____	☐ Data ok ☐ Junk
Comments: 5 μA						

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

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

Date: 21/09/18
yy mm dd

Initials: PM

Continuation of Configuration:

Luminosity Scan #2

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

Run Number: <u>12191</u>	☐ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☒ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: <u>-1</u> PS2: <u>8</u> PS3: <u>-1</u> PS4: <u>5</u> PS5: <u>-1</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): <u>19:01:30</u> Stop time (RC GUI): <u>19:15:15</u>	☐ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale <u>239</u> k SHMS prescale <u>235</u> k e- π n evts: _____ Σ e- π n evts: _____	COIN pretrig: _____ k ☒ Data ok ☐ Junk
-----------------------------	--	--	---	--	--	---

70 μ A again ; ended early because beam went down.
~5 min @ 70 μ A

Run Number: <u>12192</u>	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: <u>-1</u> PS2: <u>10</u> PS3: <u>-1</u> PS4: <u>7</u> PS5: <u>-1</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): <u>19:58</u> Stop time (RC GUI): <u>20:11</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale <u>672</u> k SHMS prescale <u>646</u> k e- π n evts: _____ Σ e- π n evts: _____	☒ Data ok ☐ Junk
-----------------------------	--	---	---	---	--	--

70 μ A

Run Number: <u>12193</u>	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: <u>-1</u> PS2: <u>10</u> PS3: <u>-1</u> PS4: <u>7</u> PS5: <u>-1</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): <u>20:12</u> Stop time (RC GUI): <u>20:24</u>	☒ Settings Verified? ☐ HV OK? ☒ 50k OK?	HMS prescale <u>503</u> k SHMS prescale <u>488</u> k e- π n evts: _____ Σ e- π n evts: _____	☒ Data ok ☒ Junk
-----------------------------	--	---	---	--	--	---

55 μ A

GOOD DATA →

Run Number: <u>12194</u>	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: <u>-1</u> PS2: <u>9</u> PS3: <u>-1</u> PS4: <u>6</u> PS5: <u>-1</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): <u>20:26:13</u> Stop time (RC GUI): <u>20:36:26</u>	☒ Settings Verified? ☒ HV OK? ☐ 50k OK?	HMS prescale <u>726</u> k SHMS prescale <u>717</u> k e- π n evts: _____ Σ e- π n evts: _____	☒ Data ok ☐ Junk
-----------------------------	--	--	---	--	--	--

40 μ A

470

Run Number: <u>12195</u>	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: <u>-1</u> PS2: <u>9</u> PS3: <u>-1</u> PS4: <u>6</u> PS5: <u>-1</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): <u>20:39:42</u> Stop time (RC GUI): <u>20:50:20</u>	☐ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale <u>464</u> k SHMS prescale <u>464</u> k e- π n evts: _____ Σ e- π n evts: _____	☒ Data ok ☐ Junk
-----------------------------	--	--	---	--	--	--

25 μ A

Run Number: <u>12196</u>	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: <u>-1</u> PS2: <u>9</u> PS3: <u>-1</u> PS4: <u>5</u> PS5: <u>-1</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): <u>20:52:14</u> Stop time (RC GUI): <u>21:02:38</u>	☒ Settings Verified? ☒ HV OK? ☐ 50k OK?	HMS prescale <u>224</u> k SHMS prescale <u>225</u> k e- π n evts: _____ Σ e- π n evts: _____	☒ Data ok ☐ Junk
-----------------------------	--	--	---	--	--	--

* 3 min down time, so ... 11 ke a bit short

18 μ A

* PS2=9 was setting as starting, PS4=6 saved as PS2=8, PS4=5 when properly started

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

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

Date: 21/09/18
yy mm dd

Initials: *fm*

Continuation of Configuration:

Luminosity Scan #2

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

Run Number: 12197	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm	PS1: -1 PS2: 1 PS3: 1 PS4: 4 PS5: -1 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 21:05:05 Stop time (RC GUI): 21:15:12	☒ Settings Verified? ☐ HV OK? ☒ 50k OK?	HMS prescale 629 k SHMS prescale 685 k $e-\pi n$ evts: _____ $\Sigma e-\pi n$ evts: _____	COIN pretrig: _____ k ☒ Data ok ☐ Junk
Comments: 10mA						

Run Number: 12198	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm	PS1: -1 PS2: 6 PS3: -1 PS4: 3 PS5: -1 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 21:17:02 Stop time (RC GUI): 21:27:08	☒ Settings Verified? ☐ HV OK? ☒ 50k OK?	HMS prescale 594 k SHMS prescale 707 k $e-\pi n$ evts: _____ $\Sigma e-\pi n$ evts: _____	COIN pretrig: _____ k ☒ Data ok ☐ Junk
Comments: 5mA Brief beam down at start						

Run Number: 12199	☒ 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): 21:31:11 Stop time (RC GUI): 21:44:32	☒ 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
Comments: 70mA Again						

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
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 SHMS prescale ____ k $e-\pi n$ evts: _____ $\Sigma e-\pi n$ 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 SHMS prescale ____ k $e-\pi n$ evts: _____ $\Sigma e-\pi n$ 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 09 18
yy mm dd

Initials: _____

Configuration Name: _____

FADC Realtime Study #1

E_{beam} : 9.159 GeV

I_{beam} : 40 μA

Purpose:

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

Raster: ☒ On ☐ Off
Size: 2x2

Beam position and angle on target:

3H07A	X	Y
-0.50 mm		0.0 mm
Nomin:		Nomin:
3H07C	X	Y
-0.90 mm		-0.31 mm
Nomin:		Nomin:

HMS

SHMS

Q1	I-SET (from PSU) <u>486.9900</u> A B-HALL <u>0.65260</u> T	I-SET (from PSU) <u>1080.8100</u> A B-HALL <u>-6.876</u> KG	HB
Q2	I-SET (from PSU) <u>387.2190</u> A B-HALL <u>-0.74602</u> T	I-SET (from PSU) <u>684.5010</u> A B-HALL <u>4.868</u> KG	Q1
Q3	I-SET (from PSU) <u>188.2990</u> A B-HALL <u>0.37982</u> T	I-SET (from PSU) <u>1149.7400</u> A B-HALL <u>-10.883</u> KG	Q2
D	I-READ <u>1144.5</u> A B-NMR <u>1.0233300</u> T	I-SET (from PSU) <u>756.5200</u> A B-HALL <u>-7.391</u> KG	Q3
	If momentum increased: ☐ HMS cycled? ☒ SHMS cycled?	I-SET (from PSU) <u>1040.1400</u> A B-NMR <u>7.615</u> KG	D

Run Number:

12200

- ☒ 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: 6 / fadc

Start time (RC GUI):

22:32:06

Stop time (RC GUI):

22:43:05

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

HMS prescale: 149 k
pretrig: _____

$e-\pi n$ evts:

11599

SHMS prescale: 181 k
pretrig: _____

$\Sigma e-\pi n$ evts:

11599

COIN pretrig: 726 k

☒ Data ok

☐ Junk

Comments:

40 μA

Run Number:

12201

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

PS1: 11
PS2: -1
PS3: -1
PS4: 8
PS5: -1
PS6: -1
Mode10: 6 / fadc

Start time (RC GUI):

22:43:48

Stop time (RC GUI):

23:00:57

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

HMS prescale: 423 k
pretrig: 515

$e-\pi n$ evts:

32487

SHMS prescale: 515 k
pretrig: _____

$\Sigma e-\pi n$ evts:

44086

COIN pretrig: 2089 k

☒ Data ok

☐ Junk

Comments:

40 μA

Run Number:

12202

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

PS1: 10
PS2: -1
PS3: -1
PS4: 7
PS5: 0
PS6: -1
Mode10: 6 / fadc

Start time (RC GUI):

23:05:34

Stop time (RC GUI):

23:44:31

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

HMS prescale: 591 k
pretrig: 721

$e-\pi n$ evts:

46782

SHMS prescale: 1947 k
pretrig: _____

$\Sigma e-\pi n$ evts:

67451

COIN pretrig: 2274 k

☒ Data ok

☐ Junk

Comments:

30 μA

Run Number:

12203

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

PS1: 9
PS2: -1
PS3: -1
PS4: 6
PS5: -1
PS6: 0
Mode10: 6 / fadc

Start time (RC GUI):

23:47:56

Stop time (RC GUI):

00:13:21

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

HMS prescale: 1156 k
pretrig: _____

$e-\pi n$ evts:

23365

SHMS prescale: 1447 k
pretrig: _____

$\Sigma e-\pi n$ evts:

114233

COIN pretrig: 826 k

☒ Data ok

☐ Junk

Comments:

20 μA

23365

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

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

Date: 21/09/18
yy mm dd

Initials: NH

Continuation of Configuration:

Fadc deaulttime
study # 1

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

Run Number: 12204	☒ 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): 00:14:05 Stop time (RC GUI): 00:40:02	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale 1224 k pretrig: $e-\pi n$ evts: 24743	SHMS prescale 1532 k pretrig: $\Sigma e-\pi n$ evts: 138976	COIN pretrig: 875 k ☒ Data ok ☐ Junk
Comments: 20 μA 48108							

Run Number: 12205	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: 9 PS2: -1 PS3: -1 PS4: 5 PS5: 0 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 00:42:00 Stop time (RC GUI): 01:04:00	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale 1622 k pretrig: $e-\pi n$ evts: 17040	SHMS prescale 1047 k pretrig: $\Sigma e-\pi n$ evts: 155016	COIN pretrig: 508 k ☒ Data ok ☐ Junk
Comments: 16 μA coda Ended Funny 17040							

Run Number: 12206	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: 9 PS2: -1 PS3: -1 PS4: 5 PS5: 0 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 01:06:28 Stop time (RC GUI): 1:27:46	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale 1608 k pretrig: $e-\pi n$ evts: 16725	SHMS prescale 1039 k pretrig: $\Sigma e-\pi n$ evts: 172741	COIN pretrig: 504 k ☒ Data ok ☐ Junk
Comments: 16 μA 33765							

Run Number: 12207	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: 9 PS2: -1 PS3: -1 PS4: 5 PS5: 0 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 01:28:24 Stop time (RC GUI):	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale 1509 k pretrig: $e-\pi n$ evts: 15775	SHMS prescale 973 k pretrig: $\Sigma e-\pi n$ evts: 188516	COIN pretrig: 471 k ☒ Data ok ☐ Junk
Comments: 16 μA coda Ended Funny 49540							

Run Number: 12208	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: 9 PS2: -1 PS3: -1 PS4: 5 PS5: 0 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 1:51:58 Stop time (RC GUI): 2:21:44	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale 1690 k pretrig: $e-\pi n$ evts: 17691	SHMS prescale 1095 k pretrig: $\Sigma e-\pi n$ evts: 206207	COIN pretrig: 436 k ☒ Data ok ☐ Junk
Comments: 12 μA 17691							

Run Number: 12209	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: 8 PS2: -1 PS3: -1 PS4: 5 PS5: 0 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 2:22:31 Stop time (RC GUI): 2:45:07	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale 1282 k pretrig: $e-\pi n$ evts: 13364	SHMS prescale 1654 k pretrig: $\Sigma e-\pi n$ evts: 219571	COIN pretrig: 331 k ☒ Data ok ☐ Junk
Comments: 12 μA 31055							

p(e,e' π)n Run Sheet

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

Date: 21/07/19
yy mm dd

Initials: NH

Continuation of Configuration:

FADC deadtime study
#1

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

Run Number: <u>12210</u>	☒ 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>5</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): <u>2:46:07</u> Stop time (RC GUI): <u>3:10</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale <u>1291</u> k SHMS prescale <u>1665</u> k e- π n evts: <u>13417</u> Σ e- π n evts: <u>23288</u>	COIN pretrig: <u>332</u> k ☒ Data ok ☐ Junk
Comments: <u>12 μA</u> <u>coda ended funny</u> <u>44472</u>						

Run Number: <u>12211</u>	☒ 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>5</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): <u>3:12:37</u> Stop time (RC GUI): <u>3:23:13</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale <u>599</u> k SHMS prescale <u>771</u> k e- π n evts: <u>6260</u> Σ e- π n evts: <u>23248</u>	COIN pretrig: <u>154</u> k ☒ Data ok ☐ Junk
Comments: <u>12 μA</u> <u>coda ended funny</u> <u>50732</u>						

Run Number: <u>12212</u>	☒ 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>4</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): <u>3:24:59</u> Stop time (RC GUI): <u>3:52</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale <u>1959</u> k SHMS prescale <u>1339</u> k e- π n evts: <u>10935</u> Σ e- π n evts: <u>26973</u>	COIN pretrig: <u>214</u> k ☒ Data ok ☐ Junk
Comments: <u>8 μA</u> <u>coda ended funny</u> <u>10935</u>						

Run Number: <u>12213</u>	☒ 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>4</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): <u>3:55:04</u> Stop time (RC GUI): <u>4:20:11</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale <u>1803</u> k SHMS prescale <u>1232</u> k e- π n evts: <u>10089</u> Σ e- π n evts: <u>266272</u>	COIN pretrig: <u>196</u> k ☒ Data ok ☐ Junk
Comments: <u>8 μA</u> <u>coda ended funny</u> <u>21024</u>						

Run Number: <u>12214</u>	☒ 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>4</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): <u>4:20:54</u> Stop time (RC GUI): <u>4:45</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale <u>1714</u> k SHMS prescale <u>1172</u> k e- π n evts: <u>9392</u> Σ e- π n evts: <u>269654</u>	COIN pretrig: <u>186</u> k ☒ Data ok ☐ Junk
Comments: <u>8 μA</u> <u>coda ended funny</u> <u>30416</u>						

Run Number: <u>12215</u>	☒ 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>4</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): <u>4:47:11</u> Stop time (RC GUI): <u>5:13:28</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale <u>1787</u> k SHMS prescale <u>1221</u> k e- π n evts: <u>9839</u> Σ e- π n evts: <u>279503</u>	COIN pretrig: <u>194</u> k ☒ Data ok ☐ Junk
Comments: <u>8 μA</u> <u>coda ended funny</u> <u>40255</u>						

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

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

Date: 21/09/19
yy mm dd

Initials: NH

Continuation of Configuration:

FADC lead time
study #1

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

Run Number: <u>12216</u>	☒ 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>4</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): <u>5:14:10</u> Stop time (RC GUI): <u>5:34:16</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale <u>1438</u> k pretrig: $e-\pi n$ evts: <u>7945</u>	SHMS prescale <u>182</u> k pretrig: $\Sigma e-\pi n$ evts: <u>28748</u>	COIN pretrig: <u>157</u> k ☒ Data ok ☐ Junk
Comments: <u>8mA</u>							

Run Number: <u>12217</u>	☐ 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>5</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): <u>5:48:47</u> Stop time (RC GUI): <u>6:13:12</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale <u>1599</u> k pretrig: $e-\pi n$ evts: <u>13683</u>	SHMS prescale <u>1578</u> k pretrig: $\Sigma e-\pi n$ evts: <u>301131</u>	COIN pretrig: <u>360</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: 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:							

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

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

Run Number:	☐ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____ Mode10: cer / fadc	Start time (RC GUI): Stop time (RC GUI):	☐ Settings Verified? ☐ HV OK? ☐ 50k OK?	HMS prescale _____ k pretrig: $e-\pi n$ evts:	SHMS prescale _____ k pretrig: $\Sigma e-\pi n$ evts:	COIN pretrig: _____ k ☐ Data ok ☐ Junk
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: 21/09/19
yy mm dd

Initials: NH

HMS

SHMS

Configuration Name:

FADC deadtime
study #2

E_{beam}: 9.157 GeV

I_{beam}: Variable μ A

Purpose:

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

Raster: ☒ On ☐ Off
Size: 2 x 2

Beam position and angle on target:

3H07A	X	Y
-0.5 mm		0.0 mm
Nomin:		Nomin:
3H07C	X	Y
-0.9 mm		-0.3 mm
Nomin:		Nomin:

Q1	I-SET (from PSU) 504.192A B-HALL	I-SET (from PSU) 927.130A B-HALL	HB
	0.6734 T	-5.867 KG	
Q2	I-SET (from PSU) 400.903 A B-HALL	I-SET (from PSU) 587.9150A B-HALL	Q1
	-0.77323T	4.180 KG	
Q3	I-SET (from PSU) 1944.934 A B-HALL	I-SET (from PSU) 987.508 A B-HALL	Q2
	0.39389 T	-9.332 KG	
D	I-READ 1187.68 A B-NMR	I-SET (from PSU) 649.772A B-HALL	Q3
	1.05947T	-6.400 KG	
	If momentum increased: ☒ HMS cycled? ☐ SHMS cycled?	I-SET (from PSU) 893.369 A B-NMR	D
		6.469 KG	

Run Number:

12218

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

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

Start time (RC GUI):

7:01:42

Stop time (RC GUI):

7:26:13

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale 17.3 k
pretrig:

e- π n evts: 8738

SHMS prescale 624.6 k
pretrig:

Σ e- π n evts: 8738

COIN pretrig: 0.86 k

☒ Data ok

☐ Junk

Comments:

70 μ A

Run Number:

12219

- ☒ 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):

7:26:46

Stop time (RC GUI):

7:57

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale 17.7 k
pretrig: 1286

e- π n evts: 8626

SHMS prescale 637.6 k
pretrig: 769

Σ e- π n evts: 17364

COIN pretrig: 0.89 k

☒ Data ok

☐ Junk

Comments:

Beam 70 μ A

Beam Tripped alot during this run

Run Number:

12220

- ☒ 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):

7:59:16

Stop time (RC GUI):

08:16

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale 17.9 k
pretrig: 761

e- π n evts: 5033

SHMS prescale 646.7 k
pretrig: 453

Σ e- π n evts: 22397

COIN pretrig: 0.9 k

☒ Data ok

☐ Junk

Comments:

70 μ A

Run Number:

12221

- ☒ 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):

08:17

Stop time (RC GUI):

08:38

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale 14.5 k
pretrig:

e- π n evts: 17833

SHMS prescale 526.8 k
pretrig:

Σ e- π n evts: 14855

COIN pretrig: 0.6 k

☒ Data ok

☐ Junk

Comments:

55 μ A

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

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

Date: 01 / 9 / 19
yy mm dd

Initials: P.S.

Continuation of Configuration:

FADC deadtime

study #2

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

Run Number: 1222	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm	PS1: 10 PS2: -1 PS3: -1 PS4: 5 PS5: 9 PS6: 7 Mode10: cer / fadc	Start time (RC GUI): 08:38 Stop time (RC GUI): 09:00	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale 14.7 k pretrig: $e-\pi n$ evts: 7526 18948	SHMS prescale 533.6 k pretrig: $\Sigma e-\pi n$ evts: 14663 36781	COIN pretrig: 0.6 k ☒ Data ok ☐ Junk
Comments: 55 MA							

Run Number: 1223	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm	PS1: 10 PS2: -1 PS3: -1 PS4: 5 PS5: 9 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 09:00 Stop time (RC GUI): 09:10	☒ Settings Verified? ☒ HV OK? ☐ 50k OK?	HMS prescale 14.1 k pretrig: $e-\pi n$ evts: 2688 6646	SHMS prescale 59.0 k pretrig: $\Sigma e-\pi n$ evts: 17351 43427	COIN pretrig: 0.6 k ☒ Data ok ☐ Junk ?
Comments: 55 MA HMS Q2 interlock (log # 3908391)							

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

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

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

Run Number:	☐ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____cm	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____ Mode10: cer / fadc	Start time (RC GUI): Stop time (RC GUI):	☐ Settings Verified? ☐ HV OK? ☐ 50k OK?	HMS prescale _____ k pretrig: $e-\pi n$ evts:	SHMS prescale _____ k pretrig: $\Sigma e-\pi n$ evts:	COIN pretrig: _____ k ☐ Data ok ☐ Junk
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: 01/09/19
yy mm dd

Initials: P.S.

Configuration Name:

Carbon Sieve Check
#2

E_{beam}: 9.157 GeV

I_{beam}: 30 μ A

HMS

p: +/- 1.0260 θ (TV): 16, 69
From GUI Nearest 0.005

SHMS

p: +/- 0.0260 θ (TV): 16, 69
From GUI Nearest 0.005

Purpose:

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

Raster: ☐ On ☒ Off
Size: _____

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) 133.81 A B-HALL 0.17224 T	I-SET (from PSU) A B-HALL kg	HB
Q2	I-SET (from PSU) 106.13 A B-HALL -0.17245 T	FSET (from PSU) A B-HALL kg	Q1
Q3	I-SET (from PSU) 51.46 A B-HALL 0.09824 T	I-SET (from PSU) A B-HALL kg	Q2
D	I-READ 312.81 A B-NMR 0.28085 T	I-SET (from PSU) A B-HALL kg	Q3
	If momentum increased: ☒ HMS cycled? ☒ SHMS cycled?	I-SET (from PSU) A B-NMR kg	D

Run Number:

12224

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

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

Start time (RC GUI):

13:20

Stop time (RC GUI):

13:52

- ☒ 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

Comments:

Run Number:

12225

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

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

Start time (RC GUI):

13:55

Stop time (RC GUI):

14:30

- ☒ 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

Comments:

Q3 increased 1%

Run Number:

12226

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

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

Start time (RC GUI):

14:32

Stop time (RC GUI):

14:35

- ☒ 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

Comments:

HMS 3/4 Run

Run Number:

12227

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

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

Start time (RC GUI):

14:43

Stop time (RC GUI):

14:48

- ☒ 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

Comments:

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

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

Date: 01/09/19
yy mm dd

Initials: P.S.

Continuation of Configuration:

Carbon Sieve Check

#2

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

Run Number: 12229	☐ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☒ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: -1 PS2: -1 PS3: -1 PS4: 0 PS5: -1 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 14:49 Stop time (RC GUI): 14:49	☒ 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:							

CODA CRASHED

Run Number: 12229	☐ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☒ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: -1 PS2: -1 PS3: -1 PS4: 0 PS5: -1 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 14:52 Stop time (RC GUI): 15:27	☒ 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 BACK TO EL-REAL, Q3 $\uparrow$ 0.5%

Run Number: 12230	☐ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☒ C 0.5% r.l. ☐ Optics ____cm ☐ _____	PS1: -1 PS2: -1 PS3: -1 PS4: 0 PS5: -1 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 15:28 Stop time (RC GUI): 15:44	☒ 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:							

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

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

Date: 21/09/19
yy mm dd

Initials: DG/GH

Use a separate sheet for each configuration.

Configuration Name: _____

FADC deadtime

study #2

E_{beam}: 9.157 GeV

I_{beam}: 55 μ A

Purpose:

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

Raster: ☒ On ☐ Off
Size: 2x2

Beam position and angle on target:

3H07A	X	Y
-0.47 mm		-0.008 mm
Nomin:		Nomin:
3H07C	X	Y
-0.87 mm		-0.31 mm
Nomin:		Nomin:

HMS

SHMS

Q1	I-SET (from PSU) 504.25 A B-HALL 2.67160 T	I-SET (from PSU) 926.85 A B-HALL -5.869 kg	HB
Q2	I-SET (from PSU) 400.93 A B-HALL -0.77193 T	I-SET (from PSU) 586.64 A B-HALL 4.180 kg	Q1
Q3	I-SET (from PSU) 194.91 A B-HALL 0.39035 T	I-SET (from PSU) 388.00 A B-HALL -9.331 kg	Q2
D	I-READ 1185.06 A B-NMR 7.05909 T	I-SET (from PSU) 849.60 A B-HALL -6.400 kg	Q3
	If momentum increased: ☒ HMS cycled? ☒ SHMS cycled?	I-SET (from PSU) 893.32 A B-NMR 6.463 kg	D

Run Number:

12233

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

PS1: 10
PS2: -1
PS3: -1
PS4: 5
PS5: 8
PS6: -1
Mode10: csp / fadc

Start time (RC GUI):

16:17:31

Stop time (RC GUI):

16:32:23

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale 732 k
pretrig:

e- π n evts:

4950

SHMS prescale 883 k
pretrig:

Σ e- π n evts:

22304

COIN pretrig: 574 k

☒ Data ok

☐ Junk

Comments:

12231-12232 (Junk)

55 mA

Run Number:

12234

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

PS1: 10
PS2: -1
PS3: -1
PS4: -5
PS5: 8
PS6: -1
Mode10: csp / fadc

Start time (RC GUI):

16:34:53

Stop time (RC GUI):

16:55:53

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale 752 k
pretrig: 11114

e- π n evts:

5227

SHMS prescale 914 k
pretrig: 11112

Σ e- π n evts:

21122

COIN pretrig: 418 k
pretrig: 11110

☒ Data ok

☐ Junk

Comments:

40 mA

Run Number:

12235-
12237

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

PS1: 10
PS2: -1
PS3: -1
PS4: 5
PS5: 8
PS6: -1
Mode10: csp / 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 pretrig: k

☐ Data ok

☒ Junk

Comments:

Junk Cock crash

Run Number:

12238

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

PS1: 10
PS2: -1
PS3: -1
PS4: 5
PS5: 8
PS6: -1
Mode10: csp / fadc

Start time (RC GUI):

17:08:37

Stop time (RC GUI):

17:34:11

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale 743 k
pretrig:

e- π n evts:

5250

SHMS prescale 903 k
pretrig:

Σ e- π n evts:

1457

COIN pretrig: 414 k

☒ Data ok

☐ Junk

Comments:

40 mA

12494

24967

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

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

Date: 24/09/19
yy mm dd

Initials: RLT

Continuation of Configuration:

FADC *Leontina* #2

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

Run Number: 12239	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: 10 PS2: -7 PS3: -1 PS4: 5 PS5: 0 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 17:34:53 Stop time (RC GUI): 18:08:29	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale 1221 k pretrig: 1221 e- π n evts: 8452 20311	SHMS prescale 483 k pretrig: 483 Σ e- π n evts: 18909 45278	COIN pretrig: 675 k ☒ Data ok ☐ Junk
----------------------	---	--	---	---	--	---	---

40 mA

Run Number: 12240	☒ 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): 18:09:11 Stop time (RC GUI): 18:28:48	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale k pretrig: k e- π n evts:	SHMS prescale k pretrig: k Σ e- π n evts:	COIN pretrig: k ☐ Data ok ☐ Junk
----------------------	---	--	---	---	--	--	--

40 mA

410K events good terminator; crash after

Run Number: 12241 12240	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: 10 PS2: -7 PS3: -1 PS4: 5 PS5: 0 PS6: -7 Mode10: cer / fadc	Start time (RC GUI): 18:29:46 Stop time (RC GUI): 18:31:56	☒ Settings Verified? ☒ HV OK? ☐ 50k OK?	HMS prescale k pretrig: k e- π n evts:	SHMS prescale k pretrig: k Σ e- π n evts:	COIN pretrig: k ☒ Data ok ☐ Junk
--	---	--	---	--	--	--	---

[12242, Junk] 40 mA, Code reset at end, data free through FADC mode 10

Run Number: 12243 12242	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: 9 PS2: -1 PS3: -1 PS4: 4 PS5: 0 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 18:35:01 Stop time (RC GUI): 18:55:26	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale 889 k pretrig: 889 e- π n evts: 3135 7628	SHMS prescale 1149 k pretrig: 1149 Σ e- π n evts: 3135 7628	COIN pretrig: 191 k ☒ Data ok ☐ Junk
--	---	---	---	---	---	---	---

25 mA

Run Number: 12244	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: 9 PS2: -1 PS3: -1 PS4: 4 PS5: 0 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 19:56:04 Stop time (RC GUI): 19:24:20	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale 1076 k pretrig: 1076 e- π n evts: 3447 9295	SHMS prescale 1389 k pretrig: 1389 Σ e- π n evts: 7082 16423	COIN pretrig: 233 k ☒ Data ok ☐ Junk
----------------------	---	---	---	---	---	--	---

25 mA

Run Number: 12245	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: 9 PS2: -1 PS3: -1 PS4: 4 PS5: 0 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 19:25:07 Stop time (RC GUI): 19:44:36	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale 845 k pretrig: 845 e- π n evts: 3447 7392	SHMS prescale 1097 k pretrig: 1097 Σ e- π n evts: 16261 24315	COIN pretrig: 183 k ☒ Data ok ☐ Junk
----------------------	---	---	---	---	---	---	---

25 mA

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

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

Date: 21/09/19
yy mm dd

Initials: RLT

Continuation of Configuration:

FA0C *lifetime* #2

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

Run Number: <u>12246</u>	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm	PS1: <u>9</u> PS2: <u>-1</u> PS3: <u>-1</u> PS4: <u>4</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: <u>ce7</u> / fadc	Start time (RC GUI): <u>19:46:17</u> Stop time (RC GUI): <u>20:04:52</u> <u>19:50</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale <u>822</u> k pretrig: $e-\pi n$ evts: <u>7095</u>	SHMS prescale <u>1069</u> k pretrig: $\Sigma e-\pi n$ evts: <u>31410</u>	COIN pretrig: <u>179</u> k ☒ Data ok ☐ Junk
-----------------------------	---	--	---	---	---	---	---

25mA, Code crashed on end

Run Number: <u>12247</u>	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm	PS1: <u>9</u> PS2: <u>-1</u> PS3: <u>-1</u> PS4: <u>4</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: <u>ce7</u> / fadc	Start time (RC GUI): <u>20:07:02</u> Stop time (RC GUI): <u>20:25:59</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale <u>722</u> k pretrig: <u>722</u> $e-\pi n$ evts: <u>6306</u>	SHMS prescale <u>932</u> k pretrig: $\Sigma e-\pi n$ evts: <u>37716</u>	COIN pretrig: <u>157</u> k ☒ Data ok ☐ Junk
-----------------------------	---	--	---	---	--	--	---

25mA

Run Number: <u>12248</u>	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm	PS1: <u>9</u> PS2: <u>-1</u> PS3: <u>-1</u> PS4: <u>4</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: <u>ce7</u> / fadc	Start time (RC GUI): <u>20:26:35</u> Stop time (RC GUI): <u>20:50:25</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale <u>478</u> k pretrig: $e-\pi n$ evts: <u>8484</u>	SHMS prescale <u>1263</u> k pretrig: $\Sigma e-\pi n$ evts: <u>46200</u>	COIN pretrig: <u>211</u> k ☒ Data ok ☐ Junk
-----------------------------	---	--	---	---	---	---	---

25mA, Code crash

Run Number: <u>12250</u> <u>WVWVA</u>	☒ 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>3</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: <u>ce7</u> / fadc	Start time (RC GUI): <u>20:54:07</u> Stop time (RC GUI): <u>21:13:56</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale <u>1123</u> k pretrig: $e-\pi n$ evts: <u>5423</u>	SHMS prescale <u>1609</u> k pretrig: $\Sigma e-\pi n$ evts: <u>5423</u>	COIN pretrig: <u>114</u> k ☒ Data ok ☐ Junk
---	---	--	---	---	--	--	---

[12249 Junk]

18mA

Run Number: <u>12251</u>	☒ 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>3</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: <u>ce7</u> / fadc	Start time (RC GUI): <u>21:14:44</u> Stop time (RC GUI): <u>21:34:56</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale <u>1078</u> k pretrig: $e-\pi n$ evts: <u>7137</u>	SHMS prescale <u>1545</u> k pretrig: $\Sigma e-\pi n$ evts: <u>10571</u>	COIN pretrig: <u>109</u> k ☒ Data ok ☐ Junk
-----------------------------	---	--	---	---	--	---	---

18mA, Code Lifetime GUI not showing up

Run Number: <u>12252</u>	☒ 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>3</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: <u>ce7</u> / fadc	Start time (RC GUI): <u>21:35:37</u> Stop time (RC GUI): <u>21:58:12</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale <u>1254</u> k pretrig: $e-\pi n$ evts: <u>5940</u>	SHMS prescale <u>1796</u> k pretrig: $\Sigma e-\pi n$ evts: <u>16511</u>	COIN pretrig: <u>127</u> k ☒ Data ok ☐ Junk
-----------------------------	---	--	---	---	--	---	---

18mA

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

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

Date: 21 / 09 / 14
yy mm dd

Initials: PLT

Continuation of Configuration:

FADC Penetration #2

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

Run Number: 12253	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: 8 PS2: -1 PS3: -1 PS4: 13 PS5: 0 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 21:58:58 Stop time (RC GUI): 22:14:16	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale 1125 k pretrig: $e-\pi n$ evts: 5325	SHMS prescale 1610 k pretrig: $\Sigma e-\pi n$ evts: 21836	COIN pretrig: 114 k ☒ Data ok ☐ Junk
----------------------	---	--	---	---	---	--	--

18 mA

Run Number: 12254	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: 8 PS2: -1 PS3: -1 PS4: 3 PS5: 0 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 22:19:56 Stop time (RC GUI): 22:40:24	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale 1148 k pretrig: $e-\pi n$ evts: 5537	SHMS prescale 1642 k pretrig: $\Sigma e-\pi n$ evts: 27373	COIN pretrig: 117 k ☒ Data ok ☐ Junk
----------------------	---	---	---	---	---	--	--

18 mA

Run Number: 12255	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: 8 PS2: -1 PS3: -1 PS4: 3 PS5: 0 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 22:41:09 Stop time (RC GUI): 23:01:23	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale 1155 k pretrig: $e-\pi n$ evts: 5488	SHMS prescale 1654 k pretrig: $\Sigma e-\pi n$ evts: 32861	COIN pretrig: 117 k ☒ Data ok ☐ Junk
----------------------	---	---	---	---	---	--	--

18 mA

Run Number: 12256	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: 8 PS2: -1 PS3: -1 PS4: 3 PS5: 0 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 23:02:09 Stop time (RC GUI): 23:23:36	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale 1052 k pretrig: $e-\pi n$ evts: 3689	SHMS prescale 1148 k pretrig: $\Sigma e-\pi n$ evts: 36558	COIN pretrig: 84 k ☒ Data ok ☐ Junk
----------------------	---	---	---	---	---	--	---

18 mA

Run Number: 12257	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: 8 PS2: -1 PS3: -1 PS4: 3 PS5: 0 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 23:24:14 Stop time (RC GUI): 23:43:30	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale 1066 k pretrig: $e-\pi n$ evts: 5055	SHMS prescale 1526 k pretrig: $\Sigma e-\pi n$ evts: 41605	COIN pretrig: 108 k ☒ Data ok ☐ Junk
----------------------	---	---	---	---	---	--	--

18 mA

Run Number: 12258	☒ LH2 10cm ☐ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: 8 PS2: -1 PS3: -1 PS4: 3 PS5: 0 PS6: -1 Mode10: cer / fadc	Start time (RC GUI): 23:44:14 Stop time (RC GUI): 00:05:51	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale 1155 k pretrig: $e-\pi n$ evts: 5843	SHMS prescale 1614 k pretrig: $\Sigma e-\pi n$ evts: 47448	COIN pretrig: 117 k ☐ Data ok ☐ Junk
----------------------	---	---	---	---	---	--	---

18 mA

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

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

Date: 21/09/19
yy mm dd

Initials: RLT

Continuation of Configuration:

FADC Runtime #2

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

Run Number: <u>12259</u>	☐ 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>3</u> PS5: <u>0</u> PS6: <u>-1</u> Mode10: cer / fadc	Start time (RC GUI): <u>00:14:25</u> Stop time (RC GUI): <u>00:30:23</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale pretrig: <u>k</u> $e-\pi n$ evts:	SHMS prescale pretrig: <u>k</u> $\Sigma e-\pi n$ evts:	COIN pretrig: <u>k</u> ☐ Data ok ☐ Junk
-----------------------------	--	---	---	---	--	--	---

40mA

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: <u>k</u> $e-\pi n$ evts:	SHMS prescale pretrig: <u>k</u> $\Sigma e-\pi n$ evts:	COIN pretrig: <u>k</u> ☐ 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: <u>k</u> $e-\pi n$ evts:	SHMS prescale pretrig: <u>k</u> $\Sigma e-\pi n$ evts:	COIN pretrig: <u>k</u> ☐ 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: <u>k</u> $e-\pi n$ evts:	SHMS prescale pretrig: <u>k</u> $\Sigma e-\pi n$ evts:	COIN pretrig: <u>k</u> ☐ 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: <u>k</u> $e-\pi n$ evts:	SHMS prescale pretrig: <u>k</u> $\Sigma e-\pi n$ evts:	COIN pretrig: <u>k</u> ☐ 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: <u>k</u> $e-\pi n$ evts:	SHMS prescale pretrig: <u>k</u> $\Sigma e-\pi n$ evts:	COIN pretrig: <u>k</u> ☐ Data ok ☐ Junk
-------------	---	--	---	--	--	--	---