

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

can be found at [lichen.phys.uregina.ca/~huberg/fpi/](http://lichen.phys.uregina.ca/~huberg/fpi/)

Date: 19/07/18  
yy mm dd

Initials: WH

Use a separate sheet for each configuration.

Configuration Name: \_\_\_\_\_

$Q^2 = 0.375$  High  $E$

$\theta = 7.6^\circ$

$E_{\text{beam}}: 4.5$  GeV

$I_{\text{beam}}: 13$   $\mu\text{A}$

HMS

$p: +0.2520$   $\theta(\text{TV}): 10.965$   
From GUI Nearest 0.005

SHMS

$p: -2.300$   $\theta(\text{TV}): 7.645$   
From GUI Nearest 0.005

Collimator:

HMS: Large Sieve ☒

SHMS: Large Sieve ☒

Purpose:

☒ Production

☐ Test

☐ Optics

☐ Other: \_\_\_\_\_

Raster: ☒ On ☐ Off  
Size:  $2 \times 2$

Beam position and angle on target:

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

HMS

SHMS

Q1	I-SET (from PSU) 293.337 A B-HALL 0.286 kg	A	I-SET (from PSU) 760.6540 A B-HALL -4.860 kg	A	HB
Q2	I-SET (from PSU) 233.1769 A B-HALL -0.431 kg	A	I-SET (from PSU) 482.9300 A B-HALL +3.441 kg	A	Q1
Q3	I-SET (from PSU) 113.6113 A B-HALL 0.224 kg	A	I-SET (from PSU) 811.1680 A B-HALL -7.694 kg	A	Q2
D	I-READ 688.03 A B-NMR 0.6165221 T	A	I-SET (from PSU) 533.7410 A B-HALL -5.228 kg	A	Q3
	If momentum increased: <input checked="" type="checkbox"/> HMS cycled? <input type="checkbox"/> SHMS cycled?		I-SET (from PSU) 733.8390 A B-NMR +5.343 kg	A	D

Run Number:

8701

- ☐ LH2 10cm  
☐ LD2 10cm  
☐ MT thick 10cm  
☐ C 1.5% r.l.  
☐ C 0.5% r.l.  
☒ HOME

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

Start time (from RC):

Stop time (from RC):

1:35

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

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

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

COIN pretrig: k  
☐ Data ok  
☒ Junk

Comments:

JUNK

Run Number:

8702

- ☐ LH2 10cm  
☐ LD2 10cm  
☐ MT thick 10cm  
☐ C 1.5% r.l.  
☐ C 0.5% r.l.  
☒ Carbon Hole

PS1: \_\_\_\_\_  
PS2: \_\_\_\_\_  
PS3: \_\_\_\_\_  
PS4: \_\_\_\_\_  
PS5: \_\_\_\_\_  
PS6: \_\_\_\_\_

Start time (from RC):

Stop time (from RC):

4:32

- ☐ 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 CARBON HOLE

Run Number:

8703

- ☐ LH2 10cm  
☐ LD2 10cm  
☐ MT thick 10cm  
☐ C 1.5% r.l.  
☐ C 0.5% r.l.  
☒ Carbon Hole

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

Start time (from RC):

Stop time (from RC):

04:33

- ☐ 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:

Carbon Hole

Run Number:

8704

- ☒ LH2 10cm  
☐ LD2 10cm  
☐ MT thick 10cm  
☐ C 1.5% r.l.  
☐ C 0.5% r.l.  
☐ \_\_\_\_\_

PS1: 13  
PS2: -1  
PS3: 11  
PS4: -1  
PS5: 0  
PS6: -1

Start time (from RC):

Stop time (from RC):

6:07

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

HMS prescale  
pretrig: 101 k  
 $e-\pi n$  evts: 54083

SHMS prescale  
pretrig: 293 k  
 $\Sigma e-\pi n$  evts: 54083

COIN pretrig: 2.9 k  
☒ Data ok  
☐ Junk

Comments:

Alarm for SHMS Shower D went off for 1 minute (C12 R16)

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

can be found at [lichen.phys.uregina.ca/~huberg/fpi/](http://lichen.phys.uregina.ca/~huberg/fpi/)

Date: 19 / 7 / 17  
yy mm dd

Initials: WH/jrc

## Continuation of Configuration:

$$Q^2 = 0.375 \text{ High E}$$

$$\Theta_{\text{HMS}} = 7.645 \quad \Theta_{\text{SHMS}} = 10.965$$

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

Run Number: <b>8705</b>	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: 13 PS2: -1 PS3: 11 PS4: -1 PS5: 0 PS6: -1	Start time (from RC): 6:13 Stop time (from RC): 7:09	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: 334 $e-\pi n$ evts: 90317	SHMS prescale pretrig: 293 k $\Sigma e-\pi n$ evts: 144400	COIN pretrig: 9829 k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

Run Number: <b>8706</b>	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: 13 PS2: -1 PS3: 12 PS4: -1 PS5: 0 PS6: -1	Start time (from RC): 7:11 Stop time (from RC): 7:43	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: 39 k $e-\pi n$ evts: 13725	SHMS prescale pretrig: 27 k $\Sigma e-\pi n$ evts: 158725	COIN pretrig: 1718 k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments: 20 minute beam trip							

Run Number: <b>8707</b>	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: 13 PS2: -1 PS3: 12 PS4: -1 PS5: 0 PS6: -1	Start time (from RC): 7:44 Stop time (from RC): 8:26	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: 133 k $e-\pi n$ evts: 68200	SHMS prescale pretrig: 194 k $\Sigma e-\pi n$ evts: 226325	COIN pretrig: 8332 k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

Run Number: <b>8708</b>	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: 13 PS2: -1 PS3: 12 PS4: -1 PS5: 0 PS6: -1	Start time (from RC): 8:29 Stop time (from RC): 8:29	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: k $e-\pi n$ evts:	SHMS prescale pretrig: k $\Sigma e-\pi n$ evts:	COIN pretrig: k <input type="checkbox"/> Data ok <input checked="" type="checkbox"/> Junk
Comments: Junk run. MCC took beam away for tuning for Hall C.							

Run Number: <b>8709</b>	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: 13 PS2: -1 PS3: 12 PS4: -1 PS5: 0 PS6: -1	Start time (from RC): 15:13 Stop time (from RC): 16:09	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: 57 k $e-\pi n$ evts: 32119	SHMS prescale pretrig: 33 k $\Sigma e-\pi n$ evts: 258444	COIN pretrig: 3317 <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

Run Number: <b>8710</b>	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input checked="" type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: 13 PS2: -1 PS3: 12 PS4: -1 PS5: 0 PS6: -1	Start time (from RC): 16:19 Stop time (from RC): 16:47	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: k $e-\pi n$ evts:	SHMS prescale pretrig: k $\Sigma e-\pi n$ evts:	COIN pretrig: k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments: 10cm dummy, 40% A 90% LT							

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

can be found at [lichen.phys.uregina.ca/~huberg/fpi/](http://lichen.phys.uregina.ca/~huberg/fpi/)

Date: 19/07/17  
yy mm dd

Initials: RNL

Use a separate sheet for each configuration.

HMS

SHMS

Configuration Name: \_\_\_\_\_

$Q^2=0.375$ ,  $W=2.20$ , high  $E$

SHMS center

E<sub>beam</sub>: 4.547 GeV

I<sub>beam</sub>: 19.77  $\mu$ A

Purpose:

☒ Production

☐ Test

☐ Optics

☐ Other: \_\_\_\_\_

Raster: ☒ On ☐ Off

Size: 2x2

Beam position and angle on target:

3H07A	X	Y
	<u>-0.045</u> mm	<u>0.223</u> mm
Nomin:	0.00	0.20
3H07C	X	Y
	<u>-0.810</u> mm	<u>0.509</u> mm
Nomin:	-0.90	0.40

Q1	I-SET (from PSU)	A	I-SET (from PSU)	A	HB
	B-HALL	<u>294.13</u>	B-HALL	<u>760.40</u>	
Q2	I-SET (from PSU)	A	I-SET (from PSU)	A	Q1
	B-HALL	<u>0.286</u> kG	B-HALL	<u>-4.860</u> kG	
Q3	I-SET (from PSU)	A	I-SET (from PSU)	A	Q2
	B-HALL	<u>232.96</u>	B-HALL	<u>482.88</u>	
D	I-SET (from PSU)	A	I-SET (from PSU)	A	Q3
	B-HALL	<u>-0.432</u> kG	B-HALL	<u>3.443</u> kG	
D	I-SET (from PSU)	A	I-SET (from PSU)	A	D
	B-HALL	<u>113.14</u>	B-HALL	<u>811.64</u>	
D	I-READ	A	I-SET (from PSU)	A	D
	B-NMR	<u>688.03</u>	B-HALL	<u>533.84</u>	
D	I-SET (from PSU)	A	I-SET (from PSU)	A	D
	B-NMR	<u>0.6165211</u> T	B-HALL	<u>-5.227</u> kG	
D	If momentum increased:		I-SET (from PSU)	A	D
	<input type="checkbox"/> HMS cycled?		B-NMR	<u>733.88</u>	
D	<input type="checkbox"/> SHMS cycled?		B-NMR	<u>5.343</u> kG	

Run Number:

8711

Comments:

- ☒ LH2 10cm  
☐ LD2 10cm  
☐ MT thick 10cm  
☐ C 1.5% r.l.  
☐ C 0.5% r.l.  
☐ \_\_\_\_\_

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

Start time (from RC):

18:03

Stop time (from RC):

18:13

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale 21 k  
pretrig:

$e-\pi n$  evts:

10947

SHMS prescale 21 k  
pretrig:

$\Sigma e-\pi n$  evts:

10947

COIN pretrig: 1282 k

☒ Data ok

☐ Junk

Run Number:

8712

Comments:

- ☒ LH2 10cm  
☐ LD2 10cm  
☐ MT thick 10cm  
☐ C 1.5% r.l.  
☐ C 0.5% r.l.  
☐ \_\_\_\_\_

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

Start time (from RC):

18:14

Stop time (from RC):

19:12

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale 95 k  
pretrig:

$e-\pi n$  evts:

46891

SHMS prescale 94 k  
pretrig:

$\Sigma e-\pi n$  evts:

57.838

COIN pretrig: 5664 k

☒ Data ok

☐ Junk

Run Number:

8713

Comments:

- ☒ LH2 10cm  
☐ LD2 10cm  
☐ MT thick 10cm  
☐ C 1.5% r.l.  
☐ C 0.5% r.l.  
☐ \_\_\_\_\_

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

Start time (from RC):

19:13

Stop time (from RC):

19:31

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale 35 k  
pretrig:

$e-\pi n$  evts:

17156

SHMS prescale 34 k  
pretrig:

$\Sigma e-\pi n$  evts:

74994

COIN pretrig: 2111 k

☒ Data ok

☐ Junk

Run Number:

8714

Comments:

- ☒ LH2 10cm  
☐ LD2 10cm  
☐ MT thick 10cm  
☐ C 1.5% r.l.  
☐ C 0.5% r.l.  
☐ \_\_\_\_\_

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

Start time (from RC):

19:35

Stop time (from RC):

20:40

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale 49 k  
pretrig:

$e-\pi n$  evts:

24435  
(24415)

SHMS prescale 49 k  
pretrig:

$\Sigma e-\pi n$  evts:

119409

COIN pretrig: 2969 k

☒ Data ok

☐ Junk

The full replay crashed. We reran the full replay script but not  
sim of the script replayed all events. # of neutrons seemed low compared to

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

can be found at [lichen.phys.uregina.ca/~huberg/fpi/](http://lichen.phys.uregina.ca/~huberg/fpi/)

Date: 19/07/17  
yy mm dd

Initials: RIVL

## Continuation of Configuration:

$Q^2 = 0.375$ ,  $W = 2.20$ , high  $z$   
SHMS center

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

Run Number: <b>8715</b>	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: 13 PS2: -1 PS3: 12 PS4: -1 PS5: 0 PS6: -1	Start time (from RC): 20:40 Stop time (from RC): 21:39	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: 28 k $e-\pi n$ evts: 31537	SHMS prescale pretrig: 27 k $\Sigma e-\pi n$ evts: 150946	COIN pretrig: 1668 k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Comments:

full replay crashed again. it only replays part of the events.  
# of neutrons is extrapolated using run 8712. (on the plot missing most plot  
it shows 18k neutrons)

Run Number: <b>8716</b>	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: 13 PS2: -1 PS3: 12 PS4: -1 PS5: 0 PS6: -1	Start time (from RC): 21:39 Stop time (from RC): 22:38	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: 262 k $e-\pi n$ evts: 127044	SHMS prescale pretrig: 256 k $\Sigma e-\pi n$ evts:	COIN pretrig: 15600 k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Comments:

Run Number: <b>8717</b>	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: 13 PS2: -1 PS3: 12 PS4: -1 PS5: 0 PS6: -1	Start time (from RC): 22:43 Stop time (from RC): 23:44	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: 265 k $e-\pi n$ evts: 127116	SHMS prescale pretrig: 267 k $\Sigma e-\pi n$ evts:	COIN pretrig: 15892 k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Comments:

Run Number: <b>8718</b>	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: 13 PS2: -1 PS3: 12 PS4: -1 PS5: 0 PS6: -1	Start time (from RC): 23:45 Stop time (from RC): 00:45	<input checked="" type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: 295 k $e-\pi n$ evts: 140677	SHMS prescale pretrig: 230 k $\Sigma e-\pi n$ evts:	COIN pretrig: 17721 k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Comments:

Run Number: <b>8719</b>	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input checked="" type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: 12 PS2: -1 PS3: 12 PS4: -1 PS5: 0 PS6: -1	Start time (from RC): 1:10:0 Stop time (from RC): 2	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: 59 k $e-\pi n$ evts: 4017	SHMS prescale pretrig: 92 k $\Sigma e-\pi n$ evts:	COIN pretrig: 2410 k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Comments:

40MA

Run Number: <b>8720</b>	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input checked="" type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: 12 PS2: -1 PS3: 12 PS4: -1 PS5: 0 PS6: -1	Start time (from RC): 1:45 Stop time (from RC): 2:03	<input type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: 42 k $e-\pi n$ evts: 2806	SHMS prescale pretrig: 43 k $\Sigma e-\pi n$ evts:	COIN pretrig: 1099 k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Comments:

40 MA : Belongs in the next configuration  
↓



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

can be found at [lichen.phys.uregina.ca/~huberg/fpi/](http://lichen.phys.uregina.ca/~huberg/fpi/)

Date: 19/07/18  
yy mm dd

Initials: MM

Use a separate sheet for each configuration.

Configuration Name: \_\_\_\_\_

$Q^2=0.375$ ,  $W=2.20$   
SHMS, Left

E<sub>beam</sub>: 4.547 GeV

I<sub>beam</sub>: 18099  $\mu$ A

HMS

p:  $\pm 2.252$   $\theta$ (TV): 10.965  
From GUI Nearest 0.005

SHMS

p:  $\pm 2.300$   $\theta$ (TV): 12.34  
From GUI Nearest 0.005

Collimator:

HMS: Large ☒ Sieve ☐

SHMS: Large ☒ Sieve ☐

Purpose:

☒ Production

☐ Test

☐ Optics

☐ Other: \_\_\_\_\_

Raster: ☒ On ☐ Off

Size: 2x2

Beam position and angle on target:

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

HMS

SHMS

Q1	I-SET (from PSU) B-HALL	A	I-SET (from PSU) B-HALL	A	HB
	<u>294.13</u>	<u>0.288</u> kg	<u>760.25</u>	<u>-4.859</u> kg	
Q2	I-SET (from PSU) B-HALL	A	I-SET (from PSU) B-HALL	A	Q1
	<u>-232.96</u>	<u>-0.432</u> kg	<u>-482.84</u>	<u>3.441</u> kg	
Q3	I-SET (from PSU) B-HALL	A	I-SET (from PSU) B-HALL	A	Q2
	<u>113.14</u>	<u>0.227</u> kg	<u>811.64</u>	<u>-7.694</u> kg	
D	I-READ B-NMR	A	I-SET (from PSU) B-HALL	A	Q3
	<u>-688.56</u>	<u>0.61652</u> T	<u>-533.76</u>	<u>-5.225</u> kg	
If momentum increased:			I-SET (from PSU) B-NMR	A	D
<input type="checkbox"/> HMS cycled? <input type="checkbox"/> SHMS cycled?			<u>733.92</u>	<u>5.337</u> kg	

Run Number:

8721

- ☒ LH2 10cm  
☐ LD2 10cm  
☐ MT thick 10cm  
☐ C 1.5% r.l.  
☐ C 0.5% r.l.  
☐ \_\_\_\_\_

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

Start time (from RC):

2:11

Stop time (from RC):

2:24

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale  
pretrig: 37 k

$e-\pi n$  evts:

19624

SHMS prescale  
pretrig: 27 k

$\Sigma e-\pi n$  evts:

19624

COIN pretrig: 1581 k

☒ Data ok

☐ Junk

Comments:

19  $\mu$ A

Run Number:

8722

- ☒ LH2 10cm  
☐ LD2 10cm  
☐ MT thick 10cm  
☐ C 1.5% r.l.  
☐ C 0.5% r.l.  
☐ \_\_\_\_\_

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

Start time (from RC):

2:26

Stop time (from RC):

3:07

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale  
pretrig: 165 k

$e-\pi n$  evts:

86576

SHMS prescale  
pretrig: 119 k

$\Sigma e-\pi n$  evts:

106200

COIN pretrig: 1937 k

☒ Data ok

☐ Junk

Comments:

86576

Run Number:

8723

- ☒ LH2 10cm  
☐ LD2 10cm  
☐ MT thick 10cm  
☐ C 1.5% r.l.  
☐ C 0.5% r.l.  
☐ \_\_\_\_\_

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

Start time (from RC):

3:07

Stop time (from RC):

3:58

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale  
pretrig: 235 k

$e-\pi n$  evts:

122850

SHMS prescale  
pretrig: 169 k

$\Sigma e-\pi n$  evts:

229050

COIN pretrig: 9242 k

☒ Data ok

☐ Junk

Comments:

19  $\mu$ A

Run Number:

8724

- ☒ LH2 10cm  
☐ LD2 10cm  
☐ MT thick 10cm  
☐ C 1.5% r.l.  
☐ C 0.5% r.l.  
☐ \_\_\_\_\_

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

Start time (from RC):

4:02

Stop time (from RC):

4:23

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale  
pretrig: 95 k

$e-\pi n$  evts:

49554

SHMS prescale  
pretrig: 68 k

$\Sigma e-\pi n$  evts:

278604

COIN pretrig: 4062 k

☒ Data ok

☐ Junk

Comments:

19  $\mu$ A

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

can be found at [lichen.phys.uregina.ca/~huberg/fpi/](http://lichen.phys.uregina.ca/~huberg/fpi/)

Date: 19/07/18  
yy mm dd

Initials: MM

## Continuation of Configuration:

$Q^2 = 0.375$ ,  $W = 2.20$   
SHMS, Left 1

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

Run Number: 8725	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: 13 PS2: -1 PS3: 12 PS4: -1 PS5: 0 PS6: -1	Start time (from RC): 4:24 Stop time (from RC): 5:06	<input checked="" type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: 225 k $e-\pi n$ evts: 98365	SHMS prescale pretrig: 161 k $\Sigma e-\pi n$ evts: 376969	COIN pretrig: 10765 k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Comments:

Current increased from 19  $\mu A$  to 22  $\mu A$

Run Number: 8720	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input checked="" type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: 12 PS2: -1 PS3: 12 PS4: -1 PS5: 0 PS6: -1	Start time (from RC): 1:45 Stop time (from RC): 2:03	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: 42 k $e-\pi n$ evts: 2806	SHMS prescale pretrig: 43 k $\Sigma e-\pi n$ evts:	COIN pretrig: 2410 k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Comments:

40  $\mu A$

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC): Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: k $e-\pi n$ evts:	SHMS prescale pretrig: k $\Sigma e-\pi n$ evts:	COIN pretrig: k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Comments:

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC): Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: k $e-\pi n$ evts:	SHMS prescale pretrig: k $\Sigma e-\pi n$ evts:	COIN pretrig: k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Comments:

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC): Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: k $e-\pi n$ evts:	SHMS prescale pretrig: k $\Sigma e-\pi n$ evts:	COIN pretrig: k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Comments:

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC): Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: k $e-\pi n$ evts:	SHMS prescale pretrig: k $\Sigma e-\pi n$ evts:	COIN pretrig: k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Comments:



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

can be found at [lichen.phys.uregina.ca/~huberg/fpi/](http://lichen.phys.uregina.ca/~huberg/fpi/)

Date: 19 / 07 / 18  
yy mm dd

Initials: MM

Use a separate sheet for each configuration.

Configuration Name: \_\_\_\_\_

$Q^2 = 0.375$ ,  $W = 2.20$

SHMS - left 2

E<sub>beam</sub>: 4.547 GeV

I<sub>beam</sub>: \_\_\_\_\_  $\mu$ A

Purpose:

☒ Production

☐ Test

☐ Optics

☐ Other: \_\_\_\_\_

Raster: ☒ On ☐ Off  
Size: 2x2

HMS

p: +/- 2.252  $\theta$ (TV): 10.965  
From GUI Nearest 0.005

SHMS

p: +/- 2.30  $\theta$ (TV): 14.325  
From GUI Nearest 0.005

Collimator:

HMS: Large ☒  
Sieve ☐

SHMS: Large ☒  
Sieve ☐

Beam position and angle on target:

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

HMS

SHMS

Q1	I-SET (from PSU) B-HALL 294.13 A 0.289 kG	A	I-SET (from PSU) B-HALL 760.45 A -4.860 kG	A	HB
Q2	I-SET (from PSU) B-HALL -232.96 A -0.432 kG	A	I-SET (from PSU) B-HALL -482.88 A 3.441 kG	A	Q1
Q3	I-SET (from PSU) B-HALL 113.14 A 0.227 kG	A	I-SET (from PSU) B-HALL 811.64 A -7.695 kG	A	Q2
D	I-READ B-NMR -688.62 A 0.61652 T	A	I-SET (from PSU) B-HALL -533.76 A -5.227 kG	A	Q3
	If momentum increased: <input type="checkbox"/> HMS cycled? <input type="checkbox"/> SHMS cycled?		I-SET (from PSU) B-NMR 733.92 A 5.342 kG	A	D

Run Number:

8726

- ☒ LH2 10cm  
☐ LD2 10cm  
☐ MT thick 10cm  
☐ C 1.5% r.l.  
☐ C 0.5% r.l.  
☐ \_\_\_\_\_

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

Start time (from RC):

5:12

Stop time (from RC):

5:23

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale  
pretrig: 61 k

$e-\pi n$  evts:

23085

SHMS prescale  
pretrig: 31 k

$\Sigma e-\pi n$  evts:

23085

COIN pretrig: 2281 k

☒ Data ok

☐ Junk

Comments:

Current changed to (25  $\mu$ A) from 22  $\mu$ A

Run Number:

8727

- ☒ LH2 10cm  
☐ LD2 10cm  
☐ MT thick 10cm  
☐ C 1.5% r.l.  
☐ C 0.5% r.l.  
☐ \_\_\_\_\_

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

Start time (from RC):

5:24

Stop time (from RC):

5:51

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale  
pretrig: 164 k

$e-\pi n$  evts:

57944

SHMS prescale  
pretrig: 84 k

$\Sigma e-\pi n$  evts:

81029

COIN pretrig: 6300 k

☒ Data ok

☐ Junk

Comments:

Run Number:

8728

- ☒ LH2 10cm  
☐ LD2 10cm  
☐ MT thick 10cm  
☐ C 1.5% r.l.  
☐ C 0.5% r.l.  
☐ \_\_\_\_\_

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

Start time (from RC):

5:52

Stop time (from RC):

6:35

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale  
pretrig: 233 k

$e-\pi n$  evts:

82037

SHMS prescale  
pretrig: 118 k

$\Sigma e-\pi n$  evts:

163066

COIN pretrig: 8975 k

☒ Data ok

☐ Junk

Comments:

Run Number:

8729

- ☒ LH2 10cm  
☐ LD2 10cm  
☐ MT thick 10cm  
☐ C 1.5% r.l.  
☐ C 0.5% r.l.  
☐ \_\_\_\_\_

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

Start time (from RC):

6:35

Stop time (from RC):

7:05

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale  
pretrig: 180 k

$e-\pi n$  evts:

63863

SHMS prescale  
pretrig: 92 k

$\Sigma e-\pi n$  evts:

226,929

COIN pretrig: 6933 k

☒ Data ok

☐ Junk

Comments:

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

can be found at [lichen.phys.uregina.ca/~huberg/fpi/](http://lichen.phys.uregina.ca/~huberg/fpi/)

Date: 19/7/18  
yy mm dd

Initials: nm

## Continuation of Configuration:

$Q^2 = 0.375$ ,  $W = 2.20$   
shms - led t.

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

Run Number: 8730	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: 13 PS2: -1 PS3: 12 PS4: -1 PS5: 0 PS6: -1	Start time (from RC): 7:06 Stop time (from RC): 7:34	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: 172 k $e-\pi n$ evts: 60642	SHMS prescale pretrig: 88 k $\Sigma e-\pi n$ evts: 287571	COIN pretrig: 6670 k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

Run Number: 8731	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input checked="" type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: 13 PS2: -1 PS3: 12 PS4: -1 PS5: 0 PS6: -1	Start time (from RC): 7:42 Stop time (from RC): 8:54	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: k $e-\pi n$ evts:	SHMS prescale pretrig: k $\Sigma e-\pi n$ evts:	COIN pretrig: k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

40MA

Run Number: <del>8732</del>	<input type="checkbox"/> LH2 10cm <input checked="" type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	<del>PS1: 13 PS2: -1 PS3: 12 PS4: -1 PS5: 0 PS6: -1</del>	Start time (from RC):  Stop time (from RC): 	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: k $e-\pi n$ evts:	SHMS prescale pretrig: k $\Sigma e-\pi n$ evts:	COIN pretrig: k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC):  Stop time (from RC): 	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: k $e-\pi n$ evts:	SHMS prescale pretrig: k $\Sigma e-\pi n$ evts:	COIN pretrig: k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC):  Stop time (from RC): 	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: k $e-\pi n$ evts:	SHMS prescale pretrig: k $\Sigma e-\pi n$ evts:	COIN pretrig: k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC):  Stop time (from RC): 	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: k $e-\pi n$ evts:	SHMS prescale pretrig: k $\Sigma e-\pi n$ evts:	COIN pretrig: k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							



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

can be found at [lichen.phys.uregina.ca/~huberg/fpi/](http://lichen.phys.uregina.ca/~huberg/fpi/)

Date: / /  
yy mm dd

Initials: \_\_\_\_\_

Use a separate sheet for each configuration.

Configuration Name: \_\_\_\_\_

$Q^2 = 0.425$   $W = 2.20$

SHMS right - 2

E<sub>beam</sub>: 4.5 GeV

I<sub>beam</sub>: 40  $\mu$ A

HMS

p: +0 2.2260  
From GUI

$\theta$ (TV): 11.745  
Nearest 0.005

SHMS

p: -2.3260  
From GUI

$\theta$ (TV): 6.870  
Nearest 0.005

Collimator:

HMS: Large ☒  
Sieve ☐

SHMS: Large ☒  
Sieve ☐

Purpose:

☒ Production

☐ Test

☐ Optics

☐ Other: \_\_\_\_\_

Raster: ☒ On ☐ Off

Size: 2x2

Beam position and angle  
on target:

3H07A	X	Y
-0.002	mm	0.214
Nomin:		Nomin:
3H07C	X	Y
-0.808	mm	0.507
Nomin:		Nomin:

HMS

SHMS

Q1	I-SET (from PSU) 289.9505 A B-HALL <del>4.86</del> 0.284 kg	I-SET (from PSU) 769.2990 A B-HALL -4.860 kg	HB
Q2	I-SET (from PSU) 230.4816 A B-HALL -0.427 kg	I-SET (from PSU) 488.3900 A B-HALL 3.482 kg	Q1
Q3	I-SET (from PSU) 112.3045 A B-HALL 0.0222 kg	I-SET (from PSU) 820.3370 A B-HALL -7.775 kg	Q2
D	I-READ 680.61 A B-NMR 0.60940 T	I-SET (from PSU) 539.7740 A B-HALL -5.308 kg	Q3
	If momentum increased: <input type="checkbox"/> HMS cycled? <input checked="" type="checkbox"/> SHMS cycled?	I-SET (from PSU) 742.1340 A B-NMR 5.425 kg	D

Run Number:

8732

- ☐ LH2 10cm  
☐ LD2 10cm  
☒ MT thick 10cm  
☐ C 1.5% r.l.  
☐ C 0.5% r.l.  
☐ \_\_\_\_\_

PS1: 13  
PS2: -2  
PS3: -2  
PS4: -2  
PS5: -2  
PS6: -2

Start time (from RC):

10:30

Stop time (from RC):

10:51

☒ Settings  
Verified?

☒ HV OK?

☒ 50k OK?

HMS  
prescale  
pretrig: k

$e-\pi n$  evts:

11459

SHMS  
prescale  
pretrig: k

$\Sigma e-\pi n$  evts:

11459

COIN  
pretrig: k

☒ Data ok

☐ Junk

Comments:

40  $\mu$ A

Run Number:

8733

- ☒ LH2 10cm  
☐ LD2 10cm  
☐ MT thick 10cm  
☐ C 1.5% r.l.  
☐ C 0.5% r.l.  
☐ \_\_\_\_\_

PS1: 13  
PS2: -2  
PS3: -2  
PS4: -2  
PS5: -2  
PS6: -2

Start time (from RC):

11:00

Stop time (from RC):

11:10

☒ Settings  
Verified?

☒ HV OK?

☒ 50k OK?

HMS  
prescale  
pretrig: 33 k

$e-\pi n$  evts:

11459

SHMS  
prescale  
pretrig: 67 k

$\Sigma e-\pi n$  evts:

11459

COIN  
pretrig: 2716 k

☒ Data ok

☐ Junk

Comments:

Beam current 17  $\mu$ A

Run Number:

8734

- ☒ LH2 10cm  
☐ LD2 10cm  
☐ MT thick 10cm  
☐ C 1.5% r.l.  
☐ C 0.5% r.l.  
☐ \_\_\_\_\_

PS1: 13  
PS2: -2  
PS3: -2  
PS4: -2  
PS5: -2  
PS6: -2

Start time (from RC):

11:11

Stop time (from RC):

11:35

☒ Settings  
Verified?

☒ HV OK?

☒ 50k OK?

HMS  
prescale  
pretrig: 75 k

$e-\pi n$  evts:

26659

SHMS  
prescale  
pretrig: 150 k

$\Sigma e-\pi n$  evts:

38118

COIN  
pretrig: 5934 k

☒ Data ok

☐ Junk

Comments:

17  $\mu$ A

Run Number:

8735

- ☒ LH2 10cm  
☐ LD2 10cm  
☐ MT thick 10cm  
☐ C 1.5% r.l.  
☐ C 0.5% r.l.  
☐ \_\_\_\_\_

PS1: 13  
PS2: -2  
PS3: -2  
PS4: -2  
PS5: -2  
PS6: -2

Start time (from RC):

11:36

Stop time (from RC):

12:00

☒ Settings  
Verified?

☒ HV OK?

☒ 50k OK?

HMS  
prescale  
pretrig: 78 k

$e-\pi n$  evts:

26670

SHMS  
prescale  
pretrig: 150 k

$\Sigma e-\pi n$  evts:

64788

COIN  
pretrig: 5895 k

☒ Data ok

☐ Junk

Comments:

17  $\mu$ A



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

can be found at [lichen.phys.uregina.ca/~huberg/fpi/](http://lichen.phys.uregina.ca/~huberg/fpi/)

Date: \_\_\_\_/\_\_\_\_/\_\_\_\_  
yy mm dd

Initials: \_\_\_\_

## Continuation of Configuration:

$Q^2 = 0.425$ ,  $W = 2.20$   
SHMS Righ-2

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

Run Number: 8736	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: 13 PS2: -1 PS3: 12 PS4: -1 PS5: -9 PS6: -1	Start time (from RC): 12:01 Stop time (from RC): 12:25	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: 75 k $e-\pi n$ evts: 26940	SHMS prescale pretrig: 151 k $\Sigma e-\pi n$ evts: 91728	COIN pretrig: 5926k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Run Number: 8737	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: 13 PS2: -1 PS3: 12 PS4: -1 PS5: -9 PS6: -1	Start time (from RC): 12:25 Stop time (from RC): 12:50	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: 77 k $e-\pi n$ evts: 27475	SHMS prescale pretrig: 155 k $\Sigma e-\pi n$ evts: 119203	COIN pretrig: 6113 k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Run Number: 8738	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: 13 PS2: -1 PS3: 12 PS4: -1 PS5: -9 PS6: -1	Start time (from RC): 12:50 Stop time (from RC): 13:15	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: 80 k $e-\pi n$ evts: 28075	SHMS prescale pretrig: 161 k $\Sigma e-\pi n$ evts: 147278	COIN pretrig: 6391 k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Run Number: 8739	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: 13 PS2: -1 PS3: 12 PS4: -1 PS5: -9 PS6: -1	Start time (from RC): 13:16 Stop time (from RC): 13:41	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: 78 k $e-\pi n$ evts: 27715	SHMS prescale pretrig: 156 k $\Sigma e-\pi n$ evts: 174443	COIN pretrig: 6187 k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Run Number: 8740	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: 13 PS2: -1 PS3: 12 PS4: -1 PS5: -9 PS6: -1	Start time (from RC): 13:42 Stop time (from RC): 14:07	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: 81 k $e-\pi n$ evts: 28904	SHMS prescale pretrig: 163 k $\Sigma e-\pi n$ evts: 203897	COIN pretrig: 645k7 <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Run Number: 8741	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: 13 PS2: -1 PS3: 12 PS4: -1 PS5: -9 PS6: -1	Start time (from RC): 14:08 Stop time (from RC): 14:33	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: 76 k $e-\pi n$ evts: 27740	SHMS prescale pretrig: 156 k $\Sigma e-\pi n$ evts: 231637	COIN pretrig: 6144k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
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# $p(e,e'\pi)n$ Run Sheet

can be found at [lichen.phys.uregina.ca/~huberg/fpi/](http://lichen.phys.uregina.ca/~huberg/fpi/)

Date: \_\_\_\_/\_\_\_\_/\_\_\_\_  
yy mm dd

Initials: \_\_\_\_

## Continuation of Configuration:

$\theta^0 = 0.425, w = 2.20$   
SHMS Right 2

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

Run Number: <b>8742</b>	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: <b>13</b> PS2: <b>-1</b> PS3: <b>12</b> PS4: <b>-1</b> PS5: <b>9</b> PS6: <b>-1</b>	Start time (from RC): <b>14:33</b> Stop time (from RC): <b>14:59</b>	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: <b>77</b> k $e-\pi n$ evts: <b>27784</b>	SHMS prescale pretrig: <b>156</b> k $\Sigma e-\pi n$ evts: <b>259421</b>	COIN pretrig: <b>6139</b> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Run Number: <b>8743</b>	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: <b>13</b> PS2: <b>-1</b> PS3: <b>12</b> PS4: <b>-1</b> PS5: <b>0</b> PS6: <b>-1</b>	Start time (from RC): <b>15:00</b> Stop time (from RC):	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: <b>76</b> k $e-\pi n$ evts: <b>27399</b>	SHMS prescale pretrig: <b>152</b> k $\Sigma e-\pi n$ evts: <b>286820</b>	COIN pretrig: <b>5974</b> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC): Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: _____ k $e-\pi n$ evts:	SHMS prescale pretrig: _____ k $\Sigma e-\pi n$ evts:	COIN pretrig: _____ k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC): Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: _____ k $e-\pi n$ evts:	SHMS prescale pretrig: _____ k $\Sigma e-\pi n$ evts:	COIN pretrig: _____ k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC): Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: _____ k $e-\pi n$ evts:	SHMS prescale pretrig: _____ k $\Sigma e-\pi n$ evts:	COIN pretrig: _____ k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC): Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: _____ k $e-\pi n$ evts:	SHMS prescale pretrig: _____ k $\Sigma e-\pi n$ evts:	COIN pretrig: _____ k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
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# $p(e,e'\pi)n$ Run Sheet

can be found at [lichen.phys.uregina.ca/~huberg/fpi/](http://lichen.phys.uregina.ca/~huberg/fpi/)

Use a separate sheet for each configuration.

Date: 19 / 07 / 18  
yy mm dd

Initials: JZ

Configuration Name: \_\_\_\_\_

$Q^2 = 0.425$   $W = 2.20$   
right - 1

$E_{\text{beam}} = 4.547$  GeV

$I_{\text{beam}} = 20$   $\mu\text{A}$

Purpose:

☒ Production

☐ Test

☐ Optics

☐ Other: \_\_\_\_\_

Raster: ☒ On ☐ Off

Size: 2mm x 2mm

Beam position and angle on target:

3H07A	X	Y
<u>-0.075</u>	mm	<u>0.273</u> mm
Nomin:		Nomin:
3H07C	X	Y
<u>-0.872</u>	mm	<u>0.538</u> mm
Nomin:		Nomin:

HMS

SHMS

Q1	I-SET (from PSU) <u>289.9505</u> A B-HALL <u>0.285</u> kG	I-SET (from PSU) <u>769.2990</u> A B-HALL <u>-4.860</u> kG	HB
Q2	I-SET (from PSU) <u>230.4816</u> A B-HALL <u>-0.426</u> kG	I-SET (from PSU) <u>488.3900</u> A B-HALL <u>3.482</u> kG	Q1
Q3	I-SET (from PSU) <u>112.3045</u> A B-HALL <u>0.223</u> kG	I-SET (from PSU) <u>820.3370</u> A B-HALL <u>-7.775</u> kG	Q2
D	I-READ <u>680.58</u> A B-NMR <u>0.60940</u> T	I-SET (from PSU) <u>539.7740</u> A B-HALL <u>-5.308</u> kG	Q3
	If momentum increased: <input type="checkbox"/> HMS cycled? <input type="checkbox"/> SHMS cycled?	I-SET (from PSU) <u>742.1340</u> A B-NMR <u>5.418</u> kG	D

Run Number:

8744

- ☒ LH2 10cm  
☐ LD2 10cm  
☐ MT thick 10cm  
☐ C 1.5% r.l.  
☐ C 0.5% r.l.  
☐ \_\_\_\_\_

PS1: 13

PS2: -1

PS3: 12

PS4: -1

PS5: 0

PS6: -1

Start time (from RC):

15:35

Stop time (from RC):

15:44

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale  
pretrig: 32 k

$e-\pi n$  evts:

13135

SHMS prescale  
pretrig: 53 k

$\Sigma e-\pi n$  evts:

43135

COIN pretrig: 244 k

☒ Data ok

☐ Junk

Comments:

$\sim 20\mu\text{A}$

Run Number:

8745

- ☒ LH2 10cm  
☐ LD2 10cm  
☐ MT thick 10cm  
☐ C 1.5% r.l.  
☐ C 0.5% r.l.  
☐ \_\_\_\_\_

PS1: 13

PS2: -1

PS3: 12

PS4: -1

PS5: 0

PS6: -1

Start time (from RC):

15:44

Stop time (from RC):

16:12

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale  
pretrig: 94 k

$e-\pi n$  evts:

39118

SHMS prescale  
pretrig: 158 k

$\Sigma e-\pi n$  evts:

52253

COIN pretrig: 749 k

☒ Data ok

☐ Junk

Comments:

$\sim 20\mu\text{A}$

Run Number:

8746

- ☒ LH2 10cm  
☐ LD2 10cm  
☐ MT thick 10cm  
☐ C 1.5% r.l.  
☐ C 0.5% r.l.  
☐ \_\_\_\_\_

PS1: 13

PS2: -1

PS3: 12

PS4: -1

PS5: 9

PS6: -1

Start time (from RC):

16:12

Stop time (from RC):

16:38

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale  
pretrig: 87 k

$e-\pi n$  evts:

36189

SHMS prescale  
pretrig: 146 k

$\Sigma e-\pi n$  evts:

88442

COIN pretrig: 6834 k

☒ Data ok

☐ Junk

Comments:

Run Number:

8747

- ☒ LH2 10cm  
☐ LD2 10cm  
☐ MT thick 10cm  
☐ C 1.5% r.l.  
☐ C 0.5% r.l.  
☐ \_\_\_\_\_

PS1: 13

PS2: -1

PS3: 12

PS4: -1

PS5: 0

PS6: -1

Start time (from RC):

16:39

Stop time (from RC):

17:02

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale  
pretrig: 88 k

$e-\pi n$  evts:

36626

SHMS prescale  
pretrig: 148 k

$\Sigma e-\pi n$  evts:

125068

COIN pretrig: 6932 k

☒ Data ok

☐ Junk

Comments:



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

can be found at [lichen.phys.uregina.ca/~huberg/fpi/](http://lichen.phys.uregina.ca/~huberg/fpi/)

Date: \_\_\_\_/\_\_\_\_/\_\_\_\_  
yy mm dd

Initials: \_\_\_\_

## Continuation of Configuration:

$Q^2 = 0.425$ ,  $W = 2.20$

right L

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

Run Number: <b>8748</b>	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: <u>13</u> PS2: <u>-1</u> PS3: <u>13</u> PS4: <u>-1</u> PS5: <u>0</u> PS6: <u>-1</u>	Start time (from RC): <u>17:03</u> Stop time (from RC): <u>17:39</u>	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: <u>84</u> k $e-\pi n$ evts: <u>35478</u>	SHMS prescale pretrig: <u>141</u> k $\Sigma e-\pi n$ evts: <u>160546</u>	COIN pretrig: <u>6611</u> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

Run Number: <b>8749</b>	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: <u>13</u> PS2: <u>-1</u> PS3: <u>12</u> PS4: <u>-1</u> PS5: <u>0</u> PS6: <u>-1</u>	Start time (from RC): <u>17:39</u> Stop time (from RC): <u>18:07</u>	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: <u>100</u> k $e-\pi n$ evts: <u>41806</u>	SHMS prescale pretrig: <u>168</u> k $\Sigma e-\pi n$ evts: <u>202352</u>	COIN pretrig: <u>7908</u> k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

Run Number: <b>8750</b>	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: <u>13</u> PS2: <u>-1</u> PS3: <u>12</u> PS4: <u>-1</u> PS5: <u>0</u> PS6: <u>-1</u>	Start time (from RC): <u>18:07</u> Stop time (from RC): <u>18:32</u>	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: <u>86</u> k $e-\pi n$ evts: <u>36301</u>	SHMS prescale pretrig: <u>144</u> k $\Sigma e-\pi n$ evts: <u>238653</u>	COIN pretrig: <u>6748</u> k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

Run Number: <b>8751</b>	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: <u>13</u> PS2: <u>-1</u> PS3: <u>12</u> PS4: <u>-1</u> PS5: <u>0</u> PS6: <u>-1</u>	Start time (from RC): <u>18:32</u> Stop time (from RC): <u>19:03</u>	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: <u>95</u> k $e-\pi n$ evts: <u>39946</u>	SHMS prescale pretrig: <u>159</u> k $\Sigma e-\pi n$ evts: <u>278549</u>	COIN pretrig: <u>7399</u> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

Run Number: <b>8752</b>	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: <u>13</u> PS2: <u>-1</u> PS3: <u>12</u> PS4: <u>-1</u> PS5: <u>0</u> PS6: <u>-1</u>	Start time (from RC): <u>19:04</u> Stop time (from RC): <u>19:42</u>	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: <u>87</u> k $e-\pi n$ evts: <u>36854</u>	SHMS prescale pretrig: <u>146</u> k $\Sigma e-\pi n$ evts: <u>315453</u>	COIN pretrig: <u>6760</u> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

Run Number: <b>8753</b>	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input checked="" type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: <u>13</u> PS2: <u>-1</u> PS3: <u>12</u> PS4: <u>-1</u> PS5: <u>0</u> PS6: <u>-1</u>	Start time (from RC): <u>19:58</u> Stop time (from RC): <u>20:19</u>	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: k $e-\pi n$ evts:	SHMS prescale pretrig: k $\Sigma e-\pi n$ evts:	COIN pretrig: k <input type="checkbox"/> Data ok <input checked="" type="checkbox"/> Junk
Comments: <u>10cm Dummy, 40 <math>\mu</math>A, beam's down about 20 mins</u>							

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

can be found at [lichen.phys.uregina.ca/~huberg/fpi/](http://lichen.phys.uregina.ca/~huberg/fpi/)

Date: \_\_\_\_/\_\_\_\_/\_\_\_\_  
yy mm dd

Initials: \_\_\_\_

## Continuation of Configuration:

$R^2 = 0.425$   $W = 2.20$   
right -1

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

Run Number: <b>8754</b>	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input checked="" type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: <u>13</u> PS2: <u>-1</u> PS3: <u>12</u> PS4: <u>-1</u> PS5: <u>9</u> PS6: <u>-1</u>	Start time (from RC): <u>20:20</u> Stop time (from RC): <u>22:05</u>	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: k <u>e-<math>\pi</math>n evts:</u>	SHMS prescale pretrig: k <u><math>\Sigma</math> e-<math>\pi</math>n evts:</u>	COIN pretrig: k <input type="checkbox"/> Data ok <input checked="" type="checkbox"/> Junk
Comments: <u>beam's down for another 2hrs 10cm Dummy. 40 uA</u>							

Run Number: <b>8755</b>	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC): Stop time (from RC): <u>23:25</u>	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: k <u>e-<math>\pi</math>n evts:</u>	SHMS prescale pretrig: k <u><math>\Sigma</math> e-<math>\pi</math>n evts:</u>	COIN pretrig: k <input type="checkbox"/> Data ok <input checked="" type="checkbox"/> Junk
Comments: <u>Junk</u>							

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC): <u>23:26</u> Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: k <u>e-<math>\pi</math>n evts:</u>	SHMS prescale pretrig: k <u><math>\Sigma</math> e-<math>\pi</math>n evts:</u>	COIN pretrig: k <input type="checkbox"/> Data ok <input checked="" type="checkbox"/> Junk
Comments: <u>Junk</u>							

Run Number: <b>8757</b>	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input checked="" type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: <u>13</u> PS2: <u>-1</u> PS3: <u>12</u> PS4: <u>-1</u> PS5: <u>9</u> PS6: <u>-1</u>	Start time (from RC): <u>1:28</u> Stop time (from RC):	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: k <u>e-<math>\pi</math>n evts:</u>	SHMS prescale pretrig: k <u><math>\Sigma</math> e-<math>\pi</math>n evts:</u>	COIN pretrig: k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments: <u>40 uA current</u>							

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC): Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: k <u>e-<math>\pi</math>n evts:</u>	SHMS prescale pretrig: k <u><math>\Sigma</math> e-<math>\pi</math>n evts:</u>	COIN pretrig: k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC): Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: k <u>e-<math>\pi</math>n evts:</u>	SHMS prescale pretrig: k <u><math>\Sigma</math> e-<math>\pi</math>n evts:</u>	COIN pretrig: k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							



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

can be found at [lichen.phys.uregina.ca/~huberg/lpi/](http://lichen.phys.uregina.ca/~huberg/lpi/)

Date: 14/07/20  
yy mm dd

Initials: YK

Use a separate sheet for each configuration.

Configuration Name: \_\_\_\_\_

Q2-0.425,  $\omega = 2.20$   
Centre SHMS

$E_{\text{beam}}$ : 4.54 GeV

$I_{\text{beam}}$ : 40  $\mu\text{A}$

Purpose:

☒ Production

☐ Test

☐ Optics

☐ Other: \_\_\_\_\_

Raster: ☐ On ☐ Off

Size: 2x2 mm

Beam position and angle on target:

3H07A	X	Y
<u>0.029</u> mm		<u>0.20</u> mm
Nomin:		Nomin:
3H07C	X	Y
<u>-0.88</u> mm		<u>0.523</u> mm
Nomin:		Nomin:

HMS

SHMS

Q1	I-SET (from PSU) <u>290.74</u> A B-HALL <u>0.285</u> kg	I-SET (from PSU) <u>769.20</u> A B-HALL <u>-4.860</u> kg	HB
Q2	I-SET (from PSU) <u>230.34</u> A B-HALL <u>-0.425</u> kg	I-SET (from PSU) <u>488.32</u> A B-HALL <u>3.484</u> kg	Q1
Q3	I-SET (from PSU) <u>111.86</u> A B-HALL <u>0.224</u> kg	I-SET (from PSU) <u>820.84</u> A B-HALL <u>-7.775</u> kg	Q2
D	I-READ <u>680.58</u> A B-NMR <u>0.60440</u> T	I-SET (from PSU) <u>539.76</u> A B-HALL <u>-5.209</u> kg	Q3
	If momentum increased: <input type="checkbox"/> HMS cycled? <input type="checkbox"/> SHMS cycled?	I-SET (from PSU) <u>742.20</u> A B-NMR <u>5.431</u> kg	D

Run Number:

8758

- ☐ LH2 10cm  
☒ LD2 10cm  
☐ MT thick 10cm  
☐ C 1.5% r.l.  
☐ C 0.5% r.l.

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

Start time (from RC):

08:59

Stop time (from RC):

2:20

☒ 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  $\mu\text{A}$  current dummy.

Run Number:

8759

- ☒ LH2 10cm  
☐ LD2 10cm  
☐ MT thick 10cm  
☐ C 1.5% r.l.  
☐ C 0.5% r.l.

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

Start time (from RC):

2:31

Stop time (from RC):

2:41

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale

pretrig: 367 k

$e-\pi n$  evts: 21900

SHMS prescale

pretrig: 46 k

$\Sigma e-\pi n$  evts: 21900

COIN pretrig: 2207 k

☒ Data ok

☐ Junk

Comments:

20  $\mu\text{A}$  current.

Run Number:

8760

- ☒ LH2 10cm  
☐ LD2 10cm  
☐ MT thick 10cm  
☐ C 1.5% r.l.  
☐ C 0.5% r.l.

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

Start time (from RC):

2:42

Stop time (from RC):

3:20

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale

pretrig: 176 k

$e-\pi n$  evts: 105355

SHMS prescale

pretrig: 222 k

$\Sigma e-\pi n$  evts: 127255

COIN pretrig: 10640 k

☒ Data ok

☐ Junk

Comments:

20  $\mu\text{A}$  current

Run Number:

8761

- ☒ LH2 10cm  
☐ LD2 10cm  
☐ MT thick 10cm  
☐ C 1.5% r.l.  
☐ C 0.5% r.l.

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

Start time (from RC):

3:29

Stop time (from RC):

4:13

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale

pretrig: 172 k

$e-\pi n$  evts: 102050

SHMS prescale

pretrig: 217 k

$\Sigma e-\pi n$  evts: 229305

COIN pretrig: 1042 k

☒ Data ok

☐ Junk

Comments:

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

can be found at [lichen.phys.uregina.ca/~huberg/fpi/](http://lichen.phys.uregina.ca/~huberg/fpi/)

Date: 14/07/16  
yy mm dd

Initials: VJL

## Continuation of Configuration:

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

Run Number: 8762	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: 13 PS2: -1 PS3: 12 PS4: -1 PS5: 0 PS6: -1	Start time (from RC): 4:14 Stop time (from RC): 4:42	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: 109 k $e-\pi n$ evts: 64344	SHMS prescale pretrig: 137 k $\Sigma e-\pi n$ evts: 293649	COIN pretrig: 6634 k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC): Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: _____ k $e-\pi n$ evts:	SHMS prescale pretrig: _____ k $\Sigma e-\pi n$ evts:	COIN pretrig: _____ k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC): Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: _____ k $e-\pi n$ evts:	SHMS prescale pretrig: _____ k $\Sigma e-\pi n$ evts:	COIN pretrig: _____ k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC): Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: _____ k $e-\pi n$ evts:	SHMS prescale pretrig: _____ k $\Sigma e-\pi n$ evts:	COIN pretrig: _____ k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC): Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: _____ k $e-\pi n$ evts:	SHMS prescale pretrig: _____ k $\Sigma e-\pi n$ evts:	COIN pretrig: _____ k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC): Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: _____ k $e-\pi n$ evts:	SHMS prescale pretrig: _____ k $\Sigma e-\pi n$ evts:	COIN pretrig: _____ k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

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

can be found at [lichen.phys.uregina.ca/~huberg/fpi/](http://lichen.phys.uregina.ca/~huberg/fpi/)

Date: 14/07/19  
yy mm dd

Initials: VIK

Use a separate sheet for each configuration.

Configuration Name: \_\_\_\_\_

$Q2 = 0.425, W = 220$   
SHMS Lead 1

$E_{\text{beam}} = 4.547 \text{ GeV}$

$I_{\text{beam}} = 24 \mu\text{A}$

Purpose:

- ☒ Production  
☐ Test  
☐ Optics  
☐ Other: \_\_\_\_\_

Raster: ☒ On ☐ Off

Size:  $2 \times 2 \text{ mm}$

Beam position and angle on target:

3H07A	X	Y
0.223 mm		0.167 mm
Nomin:		Nomin:
3H07C	X	Y
-0.784 mm		0.474 mm
Nomin:		Nomin:

HMS

SHMS

Q1	I-SET (from PSU) 290.71 A B-HALL 0.285 kg	I-SET (from PSU) 769.10 A B-HALL 4.859 kg	HB
Q2	I-SET (from PSU) 230.34 A B-HALL -0.426 kg	I-SET (from PSU) 488.32 A B-HALL 3.484 kg	Q1
Q3	I-SET (from PSU) 111.26 A B-HALL 0.222 kg	I-SET (from PSU) 820.76 A B-HALL -7.775 kg	Q2
D	I-READ 680.50 A B-NMR 0.60946 T	I-SET (from PSU) 539.68 A B-HALL -5.309 kg	Q3
	If momentum increased: <input type="checkbox"/> HMS cycled? <input type="checkbox"/> SHMS cycled?	I-SET (from PSU) 742.24 A B-NMR 5.431 kg	D

Run Number:

8763

- ☒ LH2 10cm  
☐ LD2 10cm  
☐ MT thick 10cm  
☐ C 1.5% r.l.  
☐ C 0.5% r.l.

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

Start time (from RC):

5:27

Stop time (from RC):

05:37

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale  
pretrig: k

$e-\pi n$  evts:

24205

SHMS prescale  
pretrig: k

$\Sigma e-\pi n$  evts:

24205

COIN pretrig: k

☒ Data ok

☐ Junk

Comments:

24  $\mu\text{A}$  current.

Run Number:

8764

- ☒ LH2 10cm  
☐ LD2 10cm  
☐ MT thick 10cm  
☐ C 1.5% r.l.  
☐ C 0.5% r.l.

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

Start time (from RC):

5:37

Stop time (from RC):

6:24

☐ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale  
pretrig: 188 k

$e-\pi n$  evts:

99457

SHMS prescale  
pretrig: 173 k

$\Sigma e-\pi n$  evts:

123662

COIN pretrig: 9730 k

☐ Data ok

☐ Junk

Comments:

24  $\mu\text{A}$  current.

Run Number:

8765

- ☒ LH2 10cm  
☐ LD2 10cm  
☐ MT thick 10cm  
☐ C 1.5% r.l.  
☐ C 0.5% r.l.

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

Start time (from RC):

6:24

Stop time (from RC):

7:03

☒ Settings Verified?

☐ HV OK?

☒ 50k OK?

HMS prescale  
pretrig: 171 k

$e-\pi n$  evts:

90607

SHMS prescale  
pretrig: 157 k

$\Sigma e-\pi n$  evts:

214269

COIN pretrig: 8866 k

☒ Data ok

☐ Junk

Comments:

24  $\mu\text{A}$  current.

Run Number:

8766

- ☒ LH2 10cm  
☐ LD2 10cm  
☐ MT thick 10cm  
☐ C 1.5% r.l.  
☐ C 0.5% r.l.

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

Start time (from RC):

7:04

Stop time (from RC):

7:44

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale  
pretrig: 156 k

$e-\pi n$  evts:

79097

SHMS prescale  
pretrig: 137 k

$\Sigma e-\pi n$  evts:

293366

COIN pretrig: 7779 k

☒ Data ok

☐ Junk

Comments:

24  $\mu\text{A}$  current.

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

can be found at [lichen.phys.uregina.ca/~huberg/fpi/](http://lichen.phys.uregina.ca/~huberg/fpi/)

Date: 14/7/14  
yy mm dd

Initials: V.K

## Continuation of Configuration:

$Q^2 = 0.425$ ,  $W = 2.20$

SHMS left 1

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

Run Number: <b>2767</b>	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input checked="" type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: 13 PS2: -1 PS3: 12 PS4: -1 PS5: 0 PS6: -1	Start time (from RC): <b>7:47</b> Stop time (from RC):	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: <b>23</b> k $e-\pi n$ evts: <b>2217</b>	SHMS prescale pretrig: <b>19</b> k $\Sigma e-\pi n$ evts:	COIN pretrig: <b>777</b> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Comments:

$I = 40 \mu A$

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC):  Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: _____ k $e-\pi n$ evts:	SHMS prescale pretrig: _____ k $\Sigma e-\pi n$ evts:	COIN pretrig: _____ k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Comments:

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC):  Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: _____ k $e-\pi n$ evts:	SHMS prescale pretrig: _____ k $\Sigma e-\pi n$ evts:	COIN pretrig: _____ k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Comments:

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC):  Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: _____ k $e-\pi n$ evts:	SHMS prescale pretrig: _____ k $\Sigma e-\pi n$ evts:	COIN pretrig: _____ k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Comments:

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC):  Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: _____ k $e-\pi n$ evts:	SHMS prescale pretrig: _____ k $\Sigma e-\pi n$ evts:	COIN pretrig: _____ k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Comments:

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC):  Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: _____ k $e-\pi n$ evts:	SHMS prescale pretrig: _____ k $\Sigma e-\pi n$ evts:	COIN pretrig: _____ k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Comments:



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

can be found at [lichen.phys.uregina.ca/~huberg/fpi/](http://lichen.phys.uregina.ca/~huberg/fpi/)

Date: \_\_\_\_/\_\_\_\_/\_\_\_\_  
yy mm dd

Initials: \_\_\_\_

Use a separate sheet for each configuration.

## Configuration Name:

$Q^2 = 0.425$   $W = 2.20$   
left-2

E<sub>beam</sub>: 4.547 GeV

I<sub>beam</sub>: 40  $\mu$ A

## Purpose:

- ☒ Production  
☐ Test  
☐ Optics  
☐ Other: \_\_\_\_\_

Raster: ☒ On ☐ Off  
Size: 2mm x 2mm

## Beam position and angle on target:

3H07A	X	Y
-0.003	mm	0.199
Nomin:		Nomin:
3H07C	X	Y
-0.817	mm	0.491
Nomin:		Nomin:

HMS

SHMS

Q1	I-SET (from PSU) 289.9505 B-HALL	A	I-SET (from PSU) 769.2990 B-HALL	A	HB
	0.285	kG	-4.859	kG	
Q2	I-SET (from PSU) 230.4816 B-HALL	A	I-SET (from PSU) 488.7900 B-HALL	A	Q1
	-0.427	kG	3.482	kG	
Q3	I-SET (from PSU) 112.3045 B-HALL	A	I-SET (from PSU) 820.3370 B-HALL	A	Q2
	+0.223	kG	-7.775	kG	
D	I-READ 681.2410 B-NMR	A	I-SET (from PSU) 539.7740 B-HALL	A	Q3
	0.60940	T	-5.309	kG	
	If momentum increased:		I-SET (from PSU)		D
	<input type="checkbox"/> HMS cycled?		742.1340 B-NMR	A	
	<input type="checkbox"/> SHMS cycled?		5.425	kG	

## Run Number:

8768

- ☐ LH2 10cm  
☐ LD2 10cm  
☒ MT thick 10cm  
☐ C 1.5% r.l.  
☐ C 0.5% r.l.  
☐ \_\_\_\_\_

PS1: 13  
PS2: 12  
PS3: 12  
PS4: 1  
PS5: 9  
PS6: 1

## Start time (from RC):

08:03

## Stop time (from RC):

08:18

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

HMS  
prescale 40 k  
pretrig:

SHMS  
prescale 18 k  
pretrig:

COIN  
pretrig: 695 k

## Comments:

$I = 40 \mu$ A

## Run Number:

8769

- ☒ LH2 10cm  
☐ LD2 10cm  
☐ MT thick 10cm  
☐ C 1.5% r.l.  
☐ C 0.5% r.l.  
☐ \_\_\_\_\_

PS1: 13  
PS2: 12  
PS3: 12  
PS4: 1  
PS5: 9  
PS6: 1

## Start time (from RC):

08:25

## Stop time (from RC):

08:38

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

HMS  
prescale 51 k  
pretrig:

SHMS  
prescale 33 k  
pretrig:

COIN  
pretrig: 1980 k

## Comments:

$I = 25 \mu$ A - 28  $\mu$ A

## Run Number:

8770

- ☒ LH2 10cm  
☐ LD2 10cm  
☐ MT thick 10cm  
☐ C 1.5% r.l.  
☐ C 0.5% r.l.  
☐ \_\_\_\_\_

PS1: 13  
PS2: 12  
PS3: 12  
PS4: 1  
PS5: 9  
PS6: 1

## Start time (from RC):

08:38

## Stop time (from RC):

09:12

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

HMS  
prescale 172  
pretrig: 172 k

SHMS  
prescale 112  
pretrig: 112 k

COIN  
pretrig: 7122 k

## Comments:

75511

## Run Number:

8771

- ☒ LH2 10cm  
☐ LD2 10cm  
☐ MT thick 10cm  
☐ C 1.5% r.l.  
☐ C 0.5% r.l.  
☐ \_\_\_\_\_

PS1: 13  
PS2: 12  
PS3: 12  
PS4: 1  
PS5: 9  
PS6: 1

## Start time (from RC):

09:13

## Stop time (from RC):

09:38

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

HMS  
prescale 125 k  
pretrig:

SHMS  
prescale 81 k  
pretrig:

COIN  
pretrig: 5332 k

## Comments:

- ☒ Data ok  
☐ Junk



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

can be found at [lichen.phys.uregina.ca/~huberg/fpi/](http://lichen.phys.uregina.ca/~huberg/fpi/)

Date: \_\_\_\_/\_\_\_\_/\_\_\_\_  
yy mm dd

Initials: \_\_\_\_

## Continuation of Configuration:

$Q^2 = 0.425$ ,  $W = 2.20$

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

Run Number: <b>8772</b>	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: <b>13</b> PS2: <b>-1</b> PS3: <b>12</b> PS4: <b>-1</b> PS5: <b>0</b> PS6: <b>-1</b>	Start time (from RC): <b>09:38</b> Stop time (from RC): <b>10:02</b>	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: <b>125</b> k $e-\pi n$ evts: <b>52512</b>	SHMS prescale pretrig: <b>81</b> k $\Sigma e-\pi n$ evts: <b>206252</b>	COIN pretrig: <b>5349</b> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

Run Number: <b>8773</b>	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: <b>13</b> PS2: <b>-1</b> PS3: <b>12</b> PS4: <b>-1</b> PS5: <b>0</b> PS6: <b>-1</b>	Start time (from RC): <b>10:03</b> Stop time (from RC): <b>10:27</b>	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: <b>81</b> k $e-\pi n$ evts: <b>52141</b>	SHMS prescale pretrig: <b>125</b> k $\Sigma e-\pi n$ evts: <b>258451</b>	COIN pretrig: <b>5362</b> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

Run Number: <b>8774</b>	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: <b>13</b> PS2: <b>-1</b> PS3: <b>12</b> PS4: <b>-1</b> PS5: <b>0</b> PS6: <b>-1</b>	Start time (from RC): <b>10:28</b> Stop time (from RC): <b>10:47</b>	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: <b>97</b> k $e-\pi n$ evts: <b>41476</b>	SHMS prescale pretrig: <b>63</b> k $\Sigma e-\pi n$ evts: <b>299927</b>	COIN pretrig: <b>4142</b> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC): _____ Stop time (from RC): _____	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: _____ k $e-\pi n$ evts: _____	SHMS prescale pretrig: _____ k $\Sigma e-\pi n$ evts: _____	COIN pretrig: _____ k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC): _____ Stop time (from RC): _____	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: _____ k $e-\pi n$ evts: _____	SHMS prescale pretrig: _____ k $\Sigma e-\pi n$ evts: _____	COIN pretrig: _____ k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC): _____ Stop time (from RC): _____	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: _____ k $e-\pi n$ evts: _____	SHMS prescale pretrig: _____ k $\Sigma e-\pi n$ evts: _____	COIN pretrig: _____ k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

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

can be found at [lichen.phys.uregina.ca/~huberg/fpi/](http://lichen.phys.uregina.ca/~huberg/fpi/)

Date: 19/07/19  
yy mm dd

Initials: JZ

Use a separate sheet for each configuration.

Configuration Name: \_\_\_\_\_

Calibration runs

Purpose:

☒ Production

☐ Test

☐ Optics

☐ Other: \_\_\_\_\_

$E_{\text{beam}}$ : 4.547 GeV

$I_{\text{beam}}$ : 70  $\mu\text{A}$

Raster: ☒ On ☐ Off

Size: 2x2

Beam position and angle on target:

3H07A	X	Y
0.032	mm	0.197
Nomin:		Nomin:
3H07C	X	Y
-0.787	mm	0.506
Nomin:		Nomin:

HMS

SHMS

Q1	I-SET (from PSU) B-HALL 332.5640 A 0.325 kG	I-SET (from PSU) B-HALL 890.8170 A -5.866 kG	HB
Q2	I-SET (from PSU) B-HALL 264.3793 A -0.496 kG	I-SET (from PSU) B-HALL 586.2350 A 4.171 kG	Q1
Q3	I-SET (from PSU) B-HALL 128.7398 A 0.235 kG	I-SET (from PSU) B-HALL 984.6870 A -9.326 kG	Q2
D	I-READ B-NMR 781.1400 A 0.69887 T	I-SET (from PSU) B-HALL 647.9150 A -6.303 kG	Q3
	If momentum increased: <input type="checkbox"/> HMS cycled? <input type="checkbox"/> SHMS cycled?	I-SET (from PSU) B-NMR 890.8170 A 6.488 kG	D

Run Number:

8775

- ☒ LH2 10cm  
☐ LD2 10cm  
☐ MT thick 10cm  
☐ C 1.5% r.l.  
☐ C 0.5% r.l.  
☐ \_\_\_\_\_

PS1: 4  
PS2: -1  
PS3: 2  
PS4: -3  
PS5: -2  
PS6: -2

Start time (from RC):

11:38

Stop time (from RC):

11:38

☒ Settings Verified?

☒ HV OK?

☐ 50k OK?

HMS prescale  
pretrig: k

$e\pi n$  evts:

SHMS prescale  
pretrig: k

$\Sigma e\pi n$  evts:

COIN pretrig: k

☐ Data ok

☒ Junk

Comments:

Junk

Run Number:

8776

- ☒ LH2 10cm  
☐ LD2 10cm  
☐ MT thick 10cm  
☐ C 1.5% r.l.  
☐ C 0.5% r.l.  
☐ \_\_\_\_\_

PS1: 4  
PS2: -1  
PS3: 2  
PS4: -3  
PS5: -2  
PS6: -2

Start time (from RC):

11:39

Stop time (from RC):

12:02

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale  
pretrig: 118 k

$e\pi n$  evts:

43544

SHMS prescale  
pretrig: 380 k

$\Sigma e\pi n$  evts:

COIN pretrig: 87 k

☐ Data ok

☐ Junk

Comments:

Keep check ( $e, e'\pi$ )

Run Number:

8777

- ☒ LH2 10cm  
☐ LD2 10cm  
☐ MT thick 10cm  
☐ C 1.5% r.l.  
☐ C 0.5% r.l.  
☐ \_\_\_\_\_

PS1: 4  
PS2: -1  
PS3: 2  
PS4: -3  
PS5: -2  
PS6: -2

Start time (from RC):

12:03

Stop time (from RC):

12:24

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale  
pretrig: 126 k

$e\pi n$  evts:

416473

SHMS prescale  
pretrig: 613 k

$\Sigma e\pi n$  evts:

COIN pretrig: 85 k

☐ Data ok

☐ Junk

Comments:

Run Number:

8778

- ☒ LH2 10cm  
☐ LD2 10cm  
☐ MT thick 10cm  
☐ C 1.5% r.l.  
☐ C 0.5% r.l.  
☐ \_\_\_\_\_

PS1: 4  
PS2: -1  
PS3: 2  
PS4: -3  
PS5: -2  
PS6: -2

Start time (from RC):

12:25

Stop time (from RC):

12:46

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale  
pretrig: 115 k

$e\pi n$  evts:

42583

SHMS prescale  
pretrig: 538 k

$\Sigma e\pi n$  evts:

COIN pretrig: 78 k

☐ Data ok

☐ Junk

Comments:



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

can be found at [lichen.phys.uregina.ca/~huberg/fpi/](http://lichen.phys.uregina.ca/~huberg/fpi/)

Date: \_\_\_\_/\_\_\_\_/\_\_\_\_  
yy mm dd

Initials: \_\_\_\_\_

## Continuation of Configuration:

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

Run Number: <b>8779</b>	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input checked="" type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/> _____	PS1: <b>4</b> PS2: <b>7</b> PS3: <b>2</b> PS4: <b>7</b> PS5: <b>4</b> PS6: <b>7</b>	Start time (from RC): <b>12:54</b> Stop time (from RC): <b>13:07</b>	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: k $e-\pi n$ evts:	SHMS prescale pretrig: k $\Sigma e-\pi n$ evts:	COIN pretrig: k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments: <b>I<sub>beam</sub> = 40 nA Keep check</b>							

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/> _____	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC): Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: k $e-\pi n$ evts:	SHMS prescale pretrig: k $\Sigma e-\pi n$ evts:	COIN pretrig: k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/> _____	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC): Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: k $e-\pi n$ evts:	SHMS prescale pretrig: k $\Sigma e-\pi n$ evts:	COIN pretrig: k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/> _____	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC): Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: k $e-\pi n$ evts:	SHMS prescale pretrig: k $\Sigma e-\pi n$ evts:	COIN pretrig: k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/> _____	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC): Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: k $e-\pi n$ evts:	SHMS prescale pretrig: k $\Sigma e-\pi n$ evts:	COIN pretrig: k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/> _____	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC): Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: k $e-\pi n$ evts:	SHMS prescale pretrig: k $\Sigma e-\pi n$ evts:	COIN pretrig: k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

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

can be found at [lichen.phys.uregina.ca/~huberg/fpi/](http://lichen.phys.uregina.ca/~huberg/fpi/)

Date: \_\_\_\_/\_\_\_\_/\_\_\_\_  
yy mm dd

Initials: \_\_\_\_

Use a separate sheet for each configuration.

Configuration Name: \_\_\_\_\_

$Q^2 = 2.12$   $W = 2.05$   
 $x = 0.39$  center SHMS.

$E_{\text{beam}} = 4.547$  GeV

$I_{\text{beam}} = 40$   $\mu\text{A}$

HMS

$p = +1.6620$   $\theta(\text{TV}) = 30.645$   
From GUI Nearest 0.005

SHMS

$p = -2.7920$   $\theta(\text{TV}) = 15.140$   
From GUI Nearest 0.005

Collimator:

HMS: Large ☒ Sieve ☐

SHMS: Large ☒ Sieve ☐

Purpose:

☒ Production

☐ Test

☐ Optics

☐ Other: \_\_\_\_\_

Raster: ☒ On ☐ Off

Size:  $2 \times 2$

Beam position and angle on target:

3H07A	X	Y
-0.034	mm	0.023
Nomin:		Nomin:
3H07C	X	Y
-0.800	mm	0.491
Nomin:		Nomin:

HMS

SHMS

Q1	I-SET (from PSU)	A	I-SET (from PSU)	A	HB
	216.4515		924.4620		
Q2	B-HALL	kG	B-HALL	kG	Q1
	0.211		-5.866		
Q3	I-SET (from PSU)	A	I-SET (from PSU)	A	Q2
	172.0160		586.2350		
	B-HALL	kG	B-HALL	kG	Q3
	-0.309		4.171		
D	I-SET (from PSU)	A	I-SET (from PSU)	A	D
	83.9578		984.6870		
	B-HALL	kG	B-HALL	kG	Q3
	0.166		-9.326		
D	I-READ	A	I-SET (from PSU)	A	D
	507.84		647.9150		
	B-NMR	T	B-HALL	kG	D
	0.45508		-6.303		
If momentum increased:			I-SET (from PSU)	A	D
<input type="checkbox"/> HMS cycled?			890.8170		
<input type="checkbox"/> SHMS cycled?			B-NMR	kG	D
			6.494		

Run Number:

8780

- ☐ LH2 10cm  
☐ LD2 10cm  
☒ MT thick 10cm  
☐ C 1.5% r.l.  
☐ C 0.5% r.l.  
☐ \_\_\_\_\_

PS1: 12  
PS2: -1  
PS3: -1  
PS4: -1  
PS5: 0  
PS6: -1

Start time (from RC):

13:31

Stop time (from RC):

13:55

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale 29 k  
pretrig:

$e-\pi n$  evts:

98

SHMS prescale 22 k  
pretrig:

$\Sigma e-\pi n$  evts:

X

COIN pretrig: 22 k

☒ Data ok

☐ Junk

Comments:

Run Number:

8781

- ☒ LH2 10cm  
☐ LD2 10cm  
☐ MT thick 10cm  
☐ C 1.5% r.l.  
☐ C 0.5% r.l.  
☐ \_\_\_\_\_

PS1: 12  
PS2: -1  
PS3: -1  
PS4: -1  
PS5: 0  
PS6: -1

Start time (from RC):

14:02

Stop time (from RC):

14:24

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale 84 k  
pretrig:

$e-\pi n$  evts:

2192

SHMS prescale 86 k  
pretrig:

$\Sigma e-\pi n$  evts:

2192

COIN pretrig: 123 k

☒ Data ok

☐ Junk

Comments:

70  $\mu\text{A}$  current

Run Number:

8782

- ☒ LH2 10cm  
☐ LD2 10cm  
☐ MT thick 10cm  
☐ C 1.5% r.l.  
☐ C 0.5% r.l.  
☐ \_\_\_\_\_

PS1: 12  
PS2: -1  
PS3: -1  
PS4: -1  
PS5: 0  
PS6: -1

Start time (from RC):

14:25

Stop time (from RC):

15:06

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale 232 k  
pretrig:

$e-\pi n$  evts:

6214

SHMS prescale 240 k  
pretrig:

$\Sigma e-\pi n$  evts:

8406

COIN pretrig: 330 k

☒ Data ok

☐ Junk

Comments:

70  $\mu\text{A}$  current

Run Number:

8783

- ☒ LH2 10cm  
☐ LD2 10cm  
☐ MT thick 10cm  
☐ C 1.5% r.l.  
☐ C 0.5% r.l.  
☐ \_\_\_\_\_

PS1: 12  
PS2: -1  
PS3: -1  
PS4: -1  
PS5: 0  
PS6: -1

Start time (from RC):

15:07

Stop time (from RC):

15:35

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale 169 k  
pretrig:

$e-\pi n$  evts:

4493

SHMS prescale 175 k  
pretrig:

$\Sigma e-\pi n$  evts:

12899

COIN pretrig: 240 k

☐ Data ok

☐ Junk

Comments:

70  $\mu\text{A}$  current



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

can be found at [lichen.phys.uregina.ca/~huberg/fpi/](http://lichen.phys.uregina.ca/~huberg/fpi/)

Date: \_\_\_\_/\_\_\_\_/\_\_\_\_  
yy mm dd

Initials: \_\_\_\_

## Continuation of Configuration:

$Q^2 = 2.12$ ,  $W = 2.05$ ,  $Q_{shms} = 15.14$   
 $x = 0.39$ , low  $z$ ,  $Q_{shms} = 15.14$

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

Run Number: <b>8797</b>	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: <u>12</u> PS2: <u>-1</u> PS3: <u>7</u> PS4: <u>-1</u> PS5: <u>0</u> PS6: <u>-1</u>	Start time (from RC): <u>22:16</u> Stop time (from RC): <u>22:47</u>	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: <u>169</u> k $e-\pi n$ evts: <u>4592</u>	SHMS prescale pretrig: <u>176</u> k $\Sigma e-\pi n$ evts: <u>22026</u>	COIN pretrig: <u>243</u> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
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based on Run #8784

Run Number: <b>8798</b>	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: <u>12</u> PS2: <u>7</u> PS3: <u>7</u> PS4: <u>0</u> PS5: <u>-1</u> PS6: <u>-1</u>	Start time (from RC): <u>22:49</u> Stop time (from RC): <u>23:43</u>	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: <u>263</u> k $e-\pi n$ evts: <u>7084</u>	SHMS prescale pretrig: <u>274</u> k $\Sigma e-\pi n$ evts: <u>29110</u>	COIN pretrig: <u>383</u> k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC): Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: _____ k $e-\pi n$ evts: _____	SHMS prescale pretrig: _____ k $\Sigma e-\pi n$ evts: _____	COIN pretrig: _____ k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC): Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: _____ k $e-\pi n$ evts: _____	SHMS prescale pretrig: _____ k $\Sigma e-\pi n$ evts: _____	COIN pretrig: _____ k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC): Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: _____ k $e-\pi n$ evts: _____	SHMS prescale pretrig: _____ k $\Sigma e-\pi n$ evts: _____	COIN pretrig: _____ k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC): Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: _____ k $e-\pi n$ evts: _____	SHMS prescale pretrig: _____ k $\Sigma e-\pi n$ evts: _____	COIN pretrig: _____ k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
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# $p(e,e'\pi)n$ Run Sheet

can be found at [lichen.phys.uregina.ca/~huberg/fpi/](http://lichen.phys.uregina.ca/~huberg/fpi/)

Date: \_\_\_\_/\_\_\_\_/\_\_\_\_  
yy mm dd

Initials: \_\_\_\_

## Continuation of Configuration:

$Q^2 = 2.12$ ,  $W = 2.05$

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

Run Number: <b>8784</b>	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: <b>12</b> PS2: <b>-1</b> PS3: <b>7</b> PS4: <b>-1</b> PS5: <b>0</b> PS6: <b>-1</b>	Start time (from RC): <b>15:38</b> Stop time (from RC): <b>16:14</b>	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: <b>169</b> k $e-\pi n$ evts: <b>4627</b>	SHMS prescale pretrig: <b>176</b> k $\Sigma e-\pi n$ evts:	COIN pretrig: <b>243</b> k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments: <b>70 uA current</b> <b>17,526</b>							

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC):  Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: _____ k $e-\pi n$ evts:	SHMS prescale pretrig: _____ k $\Sigma e-\pi n$ evts:	COIN pretrig: _____ k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC):  Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: _____ k $e-\pi n$ evts:	SHMS prescale pretrig: _____ k $\Sigma e-\pi n$ evts:	COIN pretrig: _____ k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC):  Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: _____ k $e-\pi n$ evts:	SHMS prescale pretrig: _____ k $\Sigma e-\pi n$ evts:	COIN pretrig: _____ k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC):  Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: _____ k $e-\pi n$ evts:	SHMS prescale pretrig: _____ k $\Sigma e-\pi n$ evts:	COIN pretrig: _____ k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC):  Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: _____ k $e-\pi n$ evts:	SHMS prescale pretrig: _____ k $\Sigma e-\pi n$ evts:	COIN pretrig: _____ k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							



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

can be found at [lichen.phys.uregina.ca/~huberg/fpi/](http://lichen.phys.uregina.ca/~huberg/fpi/)

Date: 19/07/20  
yy mm dd

Initials: MM

## Continuation of Configuration:

$Q^2 = 2.12, |x| = 2.05, x = 0.39$   
 $\theta_{e\pi}, \theta_{HMS} = 15.14$

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

Run Number: 8805	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: 12 PS2: -1 PS3: 7 PS4: -1 PS5: 0 PS6: -1	Start time (from RC): 3:38 Stop time (from RC): 4:11	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: 195 k $e-\pi n$ evts: 5363	SHMS prescale pretrig: 204 k $\Sigma e-\pi n$ evts: 34473	COIN pretrig: 282 k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

Run Number: 8808	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: PS2: PS3: PS4: PS5: PS6:	Start time (from RC): 5:30 Stop time (from RC): 5:58	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: 168 k $e-\pi n$ evts: 4681	SHMS prescale pretrig: 176 k $\Sigma e-\pi n$ evts:	COIN pretrig: 242 k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments: $\theta_{HMS} = 15.14$							

Run Number: 8809	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: PS2: PS3: PS4: PS5: PS6:	Start time (from RC): 5:58 Stop time (from RC): 6:21	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: 135 k $e-\pi n$ evts: <del>3644</del>	SHMS prescale pretrig: 141 k $\Sigma e-\pi n$ evts:	COIN pretrig: 194 k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments: 3644							

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: PS2: PS3: PS4: PS5: PS6:	Start time (from RC):  Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: k $e-\pi n$ evts:	SHMS prescale pretrig: k $\Sigma e-\pi n$ evts:	COIN pretrig: k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: PS2: PS3: PS4: PS5: PS6:	Start time (from RC):  Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: k $e-\pi n$ evts:	SHMS prescale pretrig: k $\Sigma e-\pi n$ evts:	COIN pretrig: k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: PS2: PS3: PS4: PS5: PS6:	Start time (from RC):  Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: k $e-\pi n$ evts:	SHMS prescale pretrig: k $\Sigma e-\pi n$ evts:	COIN pretrig: k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

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

can be found at [lichen.phys.uregina.ca/~huberg/fpi/](http://lichen.phys.uregina.ca/~huberg/fpi/)

Date: 19 / 07 / 19  
yy mm dd

Initials: \_\_\_\_\_

Use a separate sheet for each configuration.

Configuration Name: \_\_\_\_\_

$Q^2 = 2.12$   $W = 2.05$

$x = 0.39$  low E

Purpose:

☒ Production

☐ Test

☐ Optics

☐ Other: \_\_\_\_\_

E<sub>beam</sub>: 4.547 GeV

I<sub>beam</sub>: 70  $\mu$ A

Raster: ☒ On ☐ Off  
Size: 2x2

HMS

p: +/- 7.6620  $\theta$ (TV): 30.64  
From GUI Nearest 0.005

SHMS

p: +/- 2.7920  $\theta$ (TV): 17.130  
From GUI Nearest 0.005

Collimator:

HMS: Large ☒ Sieve ☐

SHMS: Large ☒ Sieve ☐

Beam position and angle on target:

3H07A	X	Y
-0.025	mm	0.2
Nomin:		
3H07C	X	Y
-0.77	mm	0.512
Nomin:		

HMS

SHMS

Q1	I-SET (from PSU) 216.98 A B-HALL 0.212 kg	A	I-SET (from PSU) 924.1 A B-HALL -5.866 kg	A	HB
Q2	I-SET (from PSU) 171.75 A B-HALL -0.309 kg	A	I-SET (from PSU) 586.08 A B-HALL 4.171 kg	A	Q1
Q3	I-SET (from PSU) 83.46 A B-HALL 0.167 kg	A	I-SET (from PSU) 985.04 A B-HALL -9.324 kg	A	Q2
D	I-READ 507.25 A B-NMR 0.45506 T	A	I-SET (from PSU) 647.96 A B-HALL -6.301 kg	A	Q3
	If momentum increased: <input type="checkbox"/> HMS cycled? <input type="checkbox"/> SHMS cycled?		I-SET (from PSU) 890.88 A B-NMR 6.488 kg	A	D

Run Number:

8785

☒ LH2 10cm  
☐ LD2 10cm  
☐ MT thick 10cm  
☐ C 1.5% r.l.  
☐ C 0.5% r.l.  
☐ \_\_\_\_\_

PS1: 12  
PS2: -1  
PS3: 7  
PS4: -1  
PS5: 0  
PS6: -1

Start time (from RC):

16:25

Stop time (from RC):

16:45

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

HMS  
prescale  
pretrig: 116 k

SHMS  
prescale  
pretrig: 76 k

COIN  
pretrig: 117 k

$e-\pi n$  evts:  
2934

$\Sigma e-\pi n$  evts:  
2934

☒ Data ok  
☐ Junk

Run Number:

8786

☒ LH2 10cm  
☐ LD2 10cm  
☐ MT thick 10cm  
☐ C 1.5% r.l.  
☐ C 0.5% r.l.  
☐ \_\_\_\_\_

PS1: 12  
PS2: -1  
PS3: 7  
PS4: -1  
PS5: 0  
PS6: -1

Start time (from RC):

16:48

Stop time (from RC):

17:22

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

HMS  
prescale  
pretrig: 201 k

SHMS  
prescale  
pretrig: 131 k

COIN  
pretrig: 202 k

$e-\pi n$  evts:  
5016

$\Sigma e-\pi n$  evts:  
7950

☒ Data ok  
☐ Junk

Run Number:

8787

☒ LH2 10cm  
☐ LD2 10cm  
☐ MT thick 10cm  
☐ C 1.5% r.l.  
☐ C 0.5% r.l.  
☐ \_\_\_\_\_

PS1: 12  
PS2: -1  
PS3: 7  
PS4: -1  
PS5: 0  
PS6: -1

Start time (from RC):

17:22

Stop time (from RC):

18:01

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

HMS  
prescale  
pretrig: 227 k

SHMS  
prescale  
pretrig: 148 k

COIN  
pretrig: 228 k

$e-\pi n$  evts:  
5579

$\Sigma e-\pi n$  evts:  
13.529

☒ Data ok  
☐ Junk

Run Number:

8788

☒ LH2 10cm  
☐ LD2 10cm  
☐ MT thick 10cm  
☐ C 1.5% r.l.  
☐ C 0.5% r.l.  
☐ \_\_\_\_\_

PS1: 12  
PS2: -1  
PS3: 7  
PS4: -1  
PS5: 0  
PS6: -1

Start time (from RC):

18:02

Stop time (from RC):

18:30

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

HMS  
prescale  
pretrig: 167 k

SHMS  
prescale  
pretrig: 109 k

COIN  
pretrig: 168 k

$e-\pi n$  evts:  
4077

$\Sigma e-\pi n$  evts:  
17606

☒ Data ok  
☐ Junk



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

can be found at [lichen.phys.uregina.ca/~huberg/fpi/](http://lichen.phys.uregina.ca/~huberg/fpi/)

Date: \_\_\_\_/\_\_\_\_/\_\_\_\_  
yy mm dd

Initials: \_\_\_\_

## Continuation of Configuration:

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

Run Number: <b>8789</b>	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input checked="" type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: <b>9</b> PS2: <b>-1</b> PS3: <b>5</b> PS4: <b>5</b> PS5: <b>0</b> PS6: <b>7</b>	Start time (from RC): <b>18:40</b> Stop time (from RC): <b>19:58</b>	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: <b>67</b> k $e-\pi n$ evts: <b>56</b>	SHMS prescale pretrig: <b>68</b> k $\Sigma e-\pi n$ evts: <b>17662</b>	COIN pretrig: <b>13</b> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
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10cm dummy run

Run Number: <b>8799</b>	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: <b>12</b> PS2: <b>-1</b> PS3: <b>7</b> PS4: <b>-1</b> PS5: <b>0</b> PS6: <b>-1</b>	Start time (from RC): <b>23:53</b> Stop time (from RC): <b>00:30</b>	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: <b>216</b> k $e-\pi n$ evts: <b>5480</b>	SHMS prescale pretrig: <b>141</b> k $\Sigma e-\pi n$ evts: <b>23142</b>	COIN pretrig: <b>218</b> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
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0shms GWT 17.135 deg

Run Number: <b>8800</b>	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: <b>12</b> PS2: <b>-1</b> PS3: <b>7</b> PS4: <b>-1</b> PS5: <b>0</b> PS6: <b>-1</b>	Start time (from RC): <b>00:31</b> Stop time (from RC): <b>1:02</b>	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: <b>162</b> k $e-\pi n$ evts: <b>3959</b>	SHMS prescale pretrig: <b>106</b> k $\Sigma e-\pi n$ evts: <b>27101</b>	COIN pretrig: <b>165</b> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Run Number: <b>8801</b>	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: <b>12</b> PS2: <b>-1</b> PS3: <b>7</b> PS4: <b>-1</b> PS5: <b>0</b> PS6: <b>1</b>	Start time (from RC): <b>1:03</b> Stop time (from RC): <b>1:31</b>	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: <b>78</b> k $e-\pi n$ evts: <b>1978</b>	SHMS prescale pretrig: <b>51</b> k $\Sigma e-\pi n$ evts: <b>29079</b>	COIN pretrig: <b>87</b> k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Beam was off for approx. 5 minutes.

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC):  Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: _____ k $e-\pi n$ evts:	SHMS prescale pretrig: _____ k $\Sigma e-\pi n$ evts:	COIN pretrig: _____ k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC):  Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: _____ k $e-\pi n$ evts:	SHMS prescale pretrig: _____ k $\Sigma e-\pi n$ evts:	COIN pretrig: _____ k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
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# $p(e,e'\pi)n$ Run Sheet

can be found at [lichen.phys.uregina.ca/~huberg/fpi/](http://lichen.phys.uregina.ca/~huberg/fpi/)

Date: 19 / 7 / 20  
yy mm dd

Initials: MM

## Continuation of Configuration:

$Q^2 = 2.12$ ,  $W = 2.05$ ,  $x = 0.39$   
 $\theta_{\text{HMS}} = 17.133$

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

Run Number: 8806	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: 12 PS2: -1 PS3: 7 PS4: 0 PS5: 0 PS6: -1	Start time (from RC): 4:15 Stop time (from RC): 4:47	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: 188 k $e-\pi n$ evts: 4752	SHMS prescale pretrig: 123 k $\Sigma e-\pi n$ evts: 33831	COIN pretrig: 191 k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Comments:							
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Run Number: 8810	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: 12 PS2: -1 PS3: 7 PS4: -1 PS5: 0 PS6: -1	Start time (from RC): 6:29 Stop time (from RC): 6:40	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: k $e-\pi n$ evts:	SHMS prescale pretrig: k $\Sigma e-\pi n$ evts:	COIN pretrig: k <input type="checkbox"/> Data ok <input checked="" type="checkbox"/> Junk
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$\theta_{\text{HMS}} = 17.135$							
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Run Number: 8811	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: 12 PS2: -1 PS3: 7 PS4: -1 PS5: 0 PS6: -1	Start time (from RC): 6:31 Stop time (from RC): 6:40	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: 48 k $e-\pi n$ evts: 1174	SHMS prescale pretrig: 32 k $\Sigma e-\pi n$ evts: 35005	COIN pretrig: 46 k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
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$\theta_{\text{HMS}} = 17.135$							
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Run Number: 8812	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: 12 PS2: -1 PS3: 7 PS4: -1 PS5: 0 PS6: -1	Start time (from RC): 6:52 Stop time (from RC): 7:17	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: 153 k $e-\pi n$ evts: 3841	SHMS prescale pretrig: 101 k $\Sigma e-\pi n$ evts: 38846	COIN pretrig: 156 k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
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$\theta_{\text{HMS}} = 17.135$							
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Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC): Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: k $e-\pi n$ evts:	SHMS prescale pretrig: k $\Sigma e-\pi n$ evts:	COIN pretrig: k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Comments:							
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Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC): Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: k $e-\pi n$ evts:	SHMS prescale pretrig: k $\Sigma e-\pi n$ evts:	COIN pretrig: k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Comments:							
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# $p(e,e'\pi)n$ Run Sheet

can be found at [lichen.phys.uregina.ca/~huberg/fpi/](http://lichen.phys.uregina.ca/~huberg/fpi/)

Use a separate sheet for each configuration.

Date:      /      /       
yy mm dd

Initials:     

Configuration Name:                     

$Q^2 = 2.12, W = 2.05$

$x = 0.39$  low  $z$

Purpose:

☒ Production

☐ Test

☐ Optics

☐ Other:                     

$E_{\text{beam}}$ : 4.547 GeV

$I_{\text{beam}}$ : 70  $\mu\text{A}$

Raster: ☒ On ☐ Off

Size: 2x2

HMS

$p$ : +/- -1.6620  $\theta(\text{TV})$ : 30.64  
From GUI Nearest 0.005

SHMS

$p$ : +/- 2.7920  $\theta(\text{TV})$ : 13.140  
From GUI Nearest 0.005

Beam position and angle on target:

3H07A	X	Y
	<u>-0.020</u> mm	<u>0.227</u> mm
Nomin:		Nomin:
3H07C	X	Y
	<u>-0.812</u> mm	<u>0.509</u> mm
Nomin:		Nomin:

HMS

SHMS

Q1	I-SET (from PSU) <u>216.98</u> A B-HALL <u>0.212</u> kG	I-SET (from PSU) <u>924.20</u> A B-HALL <u>-5.866</u> kG	HB
Q2	I-SET (from PSU) <u>171.71</u> A B-HALL <u>-0.308</u> kG	I-SET (from PSU) <u>586.16</u> A B-HALL <u>4.172</u> kG	Q1
Q3	I-SET (from PSU) <u>83.44</u> A B-HALL <u>0.165</u> kG	I-SET (from PSU) <u>785.04</u> A B-HALL <u>-9.326</u> kG	Q2
D	I-READ <u>507.84</u> A B-NMR <u>0.45506</u> T	I-SET (from PSU) <u>647.96</u> A B-HALL <u>-6.304</u> kG	Q3
	If momentum increased: <input type="checkbox"/> HMS cycled? <input type="checkbox"/> SHMS cycled?	I-SET (from PSU) <u>890.88</u> A B-NMR <u>6.488</u> kG	D

Run Number:

8790

- ☐ LH2 10cm  
☐ LD2 10cm  
☒ MT thick 10cm  
☐ C 1.5% r.l.  
☐ C 0.5% r.l.  
☐

PS1:       
PS2:       
PS3:       
PS4:       
PS5:       
PS6:     

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:

junk run

Run Number:

8791

- ☐ LH2 10cm  
☐ LD2 10cm  
☒ MT thick 10cm  
☐ C 1.5% r.l.  
☐ C 0.5% r.l.  
☐

PS1: 10  
PS2: 7  
PS3: 5  
PS4: 1  
PS5: 0  
PS6: 1

Start time (from RC):

Stop time (from RC):

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

HMS prescale  
pretrig: 91 k  
 $e-\pi n$  evts: 86

SHMS prescale  
pretrig: 106 k  
 $\Sigma e-\pi n$  evts:     

COIN pretrig: 21 k

- ☒ Data ok  
☐ Junk

Comments:

10cm dummy run

Run Number:

8792

- ☒ LH2 10cm  
☐ LD2 10cm  
☐ MT thick 10cm  
☐ C 1.5% r.l.  
☐ C 0.5% r.l.  
☐

PS1: 13  
PS2: -1  
PS3: 7  
PS4: 1  
PS5: 0  
PS6: 1

Start time (from RC):

Stop time (from RC):

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

HMS prescale  
pretrig: 113 k  
 $e-\pi n$  evts: 2851

SHMS prescale  
pretrig: 91 k  
 $\Sigma e-\pi n$  evts: 2851

COIN pretrig: 227 k

- ☒ Data ok  
☐ Junk

Comments:

Run Number:

8793

- ☒ LH2 10cm  
☐ LD2 10cm  
☐ MT thick 10cm  
☐ C 1.5% r.l.  
☐ C 0.5% r.l.  
☐

PS1: 13  
PS2: -1  
PS3: 7  
PS4: -1  
PS5: 0  
PS6: -1

Start time (from RC):

Stop time (from RC):

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

HMS prescale  
pretrig: 123 k  
 $e-\pi n$  evts: 3085

SHMS prescale  
pretrig: 99 k  
 $\Sigma e-\pi n$  evts: 5936

COIN pretrig: 257 k

- ☒ Data ok  
☐ Junk

Comments:

beam was down about 15min

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

can be found at [lichen.phys.uregina.ca/~huberg/fpi/](http://lichen.phys.uregina.ca/~huberg/fpi/)

Date: \_\_\_\_/\_\_\_\_/\_\_\_\_  
yy mm dd

Initials: \_\_\_\_

## Continuation of Configuration:

$$Q^2 = 2.12, W = 2.05$$

$$x = 0.39, \text{ low } z$$

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

Run Number: <b>8794</b>	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/> _____	PS1: <u>13</u> PS2: <u>7</u> PS3: <u>7</u> PS4: <u>7</u> PS5: <u>0</u> PS6: <u>7</u>	Start time (from RC): <u>20:42</u> Stop time (from RC): <u>21:17</u>	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: <u>157</u> k $e-\pi n$ evts: <u>3902</u>	SHMS prescale pretrig: <u>127</u> k $\Sigma e-\pi n$ evts: <u>9838</u>	COIN pretrig: <u>321</u> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

Run Number: <b>8795</b>	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/> _____	PS1: <u>13</u> PS2: <u>7</u> PS3: <u>7</u> PS4: <u>7</u> PS5: <u>0</u> PS6: <u>7</u>	Start time (from RC): <u>21:18</u> Stop time (from RC): <u>21:48</u>	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: <u>166</u> k $e-\pi n$ evts: <u>4201</u>	SHMS prescale pretrig: <u>135</u> k $\Sigma e-\pi n$ evts: <u>14039</u>	COIN pretrig: <u>339</u> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

Run Number: <b>8796</b>	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/> _____	PS1: <u>13</u> PS2: <u>7</u> PS3: <u>7</u> PS4: <u>7</u> PS5: <u>0</u> PS6: <u>7</u>	Start time (from RC): <u>21:49</u> Stop time (from RC): <u>22:08</u>	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: <u>51</u> k $e-\pi n$ evts: <u>1292</u>	SHMS prescale pretrig: <u>41</u> k $\Sigma e-\pi n$ evts: <u>15331</u>	COIN pretrig: <u>109</u> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/> _____	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC):  Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: _____ k $e-\pi n$ evts:	SHMS prescale pretrig: _____ k $\Sigma e-\pi n$ evts:	COIN pretrig: _____ k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/> _____	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC):  Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: _____ k $e-\pi n$ evts:	SHMS prescale pretrig: _____ k $\Sigma e-\pi n$ evts:	COIN pretrig: _____ k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/> _____	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC):  Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: _____ k $e-\pi n$ evts:	SHMS prescale pretrig: _____ k $\Sigma e-\pi n$ evts:	COIN pretrig: _____ k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							



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

can be found at [lichen.phys.uregina.ca/~huberg/fpi/](http://lichen.phys.uregina.ca/~huberg/fpi/)

Date: 19 / 7 / 20  
yy mm dd

Initials: MM

## Continuation of Configuration:

$Q^2 = 2.12$   $|x| = 2.025$   
 $x = 0.39$  lowE SHMS = 13.140

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

Run Number: 8802	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: 12 PS2: -1 PS3: 7 PS4: -7 PS5: -9 PS6: -1	Start time (from RC): 1:45 Stop time (from RC): 2:19	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: 168 k $e-\pi n$ evts: 4194	SHMS prescale pretrig: 274 k $\Sigma e-\pi n$ evts: 19525	COIN pretrig: 342 k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Run Number: 8803	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: 12 PS2: -1 PS3: 7 PS4: -7 PS5: -9 PS6: -1	Start time (from RC): 2:19 Stop time (from RC): 2:51	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: 179 k $e-\pi n$ evts: 4319	SHMS prescale pretrig: 292 k $\Sigma e-\pi n$ evts: 23844	COIN pretrig: 364 k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Run Number: 8804	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: 12 PS2: -1 PS3: 7 PS4: -7 PS5: -9 PS6: -1	Start time (from RC): 2:51 Stop time (from RC): 3:34	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: 255 k $e-\pi n$ evts: 6346	SHMS prescale pretrig: 417 k $\Sigma e-\pi n$ evts: 30189	COIN pretrig: 522 k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC): Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: _____ k $e-\pi n$ evts: _____	SHMS prescale pretrig: _____ k $\Sigma e-\pi n$ evts: _____	COIN pretrig: _____ k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC): Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: _____ k $e-\pi n$ evts: _____	SHMS prescale pretrig: _____ k $\Sigma e-\pi n$ evts: _____	COIN pretrig: _____ k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC): Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: _____ k $e-\pi n$ evts: _____	SHMS prescale pretrig: _____ k $\Sigma e-\pi n$ evts: _____	COIN pretrig: _____ k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
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# $p(e,e'\pi)n$ Run Sheet

can be found at [lichen.phys.uregina.ca/~huberg/fpi/](http://lichen.phys.uregina.ca/~huberg/fpi/)

Date: \_\_\_\_/\_\_\_\_/\_\_\_\_  
yy mm dd

Initials: \_\_\_\_

## Continuation of Configuration:

$Q^2 = 2.12$ ,  $W = 2.025$ ,  
 $X = 0.39$ ,  $\theta_{\pi} = 13.135$

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

Run Number: <b>8807</b>	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: <u>12</u> PS2: <u>-1</u> PS3: <u>7</u> PS4: <u>-1</u> PS5: <u>0</u> PS6: <u>-1</u>	Start time (from RC): <b>4:53</b> Stop time (from RC): <b>5:26</b>	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: <b>200</b> k $e-\pi n$ evts: <b>5015</b>	SHMS prescale pretrig: <b>327</b> k $\Sigma e-\pi n$ evts: <b>35204</b>	COIN pretrig: <b>411</b> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

Run Number: <b>8813</b>	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: <u>12</u> PS2: <u>-1</u> PS3: <u>7</u> PS4: <u>-1</u> PS5: <u>0</u> PS6: <u>-1</u>	Start time (from RC): <b>7:22</b> Stop time (from RC): <b>8:07</b>	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: <b>217</b> k $e-\pi n$ evts: <b>5531</b>	SHMS prescale pretrig: <b>356</b> k $\Sigma e-\pi n$ evts: <b>40735</b>	COIN pretrig: <b>451</b> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC):  Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: _____ k $e-\pi n$ evts:	SHMS prescale pretrig: _____ k $\Sigma e-\pi n$ evts:	COIN pretrig: _____ k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC):  Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: _____ k $e-\pi n$ evts:	SHMS prescale pretrig: _____ k $\Sigma e-\pi n$ evts:	COIN pretrig: _____ k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC):  Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: _____ k $e-\pi n$ evts:	SHMS prescale pretrig: _____ k $\Sigma e-\pi n$ evts:	COIN pretrig: _____ k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC):  Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: _____ k $e-\pi n$ evts:	SHMS prescale pretrig: _____ k $\Sigma e-\pi n$ evts:	COIN pretrig: _____ k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							