

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

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

Date: 22/06/23
yy mm dd

Initials: PD/GH

Use a separate sheet for each configuration.

Configuration Name:

$Q^2=6.0$, $W=2.4$, $x=0.55$

high ϵ , SHMS Left

E_{beam} : 10.560 GeV

I_{beam} : 30 μA

Purpose:

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

Raster: ☒ On ☐ Off
Size: 2x2

Beam position and angle on target:

3H07A	<u>0.089615</u> mm	<u>-0.310438</u> mm
Nomin:	<u>-0.04</u>	<u>-0.3</u>
3H07C	<u>-0.68391</u> mm	<u>-0.57508</u> mm
Nomin:	<u>-0.68</u>	<u>-0.44</u>

HMS

SHMS

Q1	I-SET (from PSU) <u>619.1320</u> A	A	I-SET (from PSU) <u>1846.5100</u> A	HB
	B-HALL <u>0.82180</u> T	T	B-HALL <u>-11.736</u> kG	
Q2	I-SET (from PSU) <u>492.4750</u> A	A	I-SET (from PSU) <u>1157.3500</u> A	Q1
	B-HALL <u>-0.96072</u> T	T	B-HALL <u>8.248</u> kG	
Q3	I-SET (from PSU) <u>239.4360</u> A	A	I-SET (from PSU) <u>1943.9800</u> A	Q2
	B-HALL <u>0.48045</u> T	T	B-HALL <u>-18.306</u> kG	
D	I-READ <u>1466.8000</u> A	A	I-SET (from PSU) <u>1279.1200</u> A	Q3
	B-NMR <u>1.30092</u> T	T	B-HALL <u>-12.403</u> kG	
	If momentum increased: ☒ HMS cycled? ☒ SHMS cycled?		I-SET (from PSU) <u>1758.6600</u> A	D
			B-NMR <u>12.731</u> kG	

Run Number:

15136

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

PS1: 8
PS2: 7
PS3: 7
PS4: 7
PS5: 0
PS6: 0
Mode10: cer / fadc

Start time (RC GUI):

Stop time (RC GUI):

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

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

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

COIN pretrig: _____ k
☐ Data ok
☒ Junk

Comments:

Short run to check prescales.

Run Number:

15137

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

PS1: 9
PS2: 7
PS3: 7
PS4: 8
PS5: 0
PS6: 1
Mode10: cer / fadc

Start time (RC GUI):

Stop time (RC GUI):

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

HMS prescale
pretrig: 102 k
 $e-\pi n$ evts: 1956

SHMS prescale
pretrig: 115 k
 $\Sigma e-\pi n$ evts: 1956

COIN pretrig: 53 k
☒ Data ok
☐ Junk

Comments:

Beam off last 10min of run.
HMS drift chamber noisy, threshold = 5.8V

$Q=52.88\text{mc}$

Run Number:

15138

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

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

Start time (RC GUI):

Stop time (RC GUI):

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

HMS prescale
pretrig: 27 k
 $e-\pi n$ evts: 339

SHMS prescale
pretrig: 17 k
 $\Sigma e-\pi n$ evts: 1790

COIN pretrig: 13 k
☒ Data ok
☐ Junk

Comments:

$\theta = 12.305$

Run Number:

15139

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

PS1: 9
PS2: 1
PS3: 1
PS4: 8
PS5: 0
PS6: 1
Mode10: cer / fadc

Start time (RC GUI):

Stop time (RC GUI):

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

HMS prescale
pretrig: 8 k
 $e-\pi n$ evts: 90

SHMS prescale
pretrig: 10 k
 $\Sigma e-\pi n$ evts: 1880

COIN pretrig: 4 k
☒ Data ok
☐ Junk

Comments:

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Date: 22/06/25
yy mm dd

Initials: NH

Continuation of Configuration:

$Q^2 = 6.00$ $W = 2.4$ $x = 0.55$

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

high θ shans left

Run Number: <u>15140</u>	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: <u>9</u> PS2: <u>/</u> PS3: <u>/</u> PS4: <u>6</u> PS5: <u>0</u> PS6: <u>/</u> Mode10: <u>60</u> / fadc	Start time (RC GUI): <u>0:29:04</u> Stop time (RC GUI): <u>1:35:31</u>	☐ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale <u>96</u> k pretrig: e- π n evts: <u>1320</u>	SHMS prescale <u>106</u> k pretrig: Σ e- π n evts: <u>3200</u>	COIN pretrig: <u>56</u> k ☒ Data ok ☐ Junk
Comments: <u>crazy 30 s 15 nA Beam</u>							

Run Number: <u>15141</u>	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: <u>9</u> PS2: <u>/</u> PS3: <u>/</u> PS4: <u>6</u> PS5: <u>0</u> PS6: <u>/</u> Mode10: <u>60</u> / fadc	Start time (RC GUI): <u>1:36:07</u> Stop time (RC GUI): <u>2:38:38</u>	☐ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale <u>107</u> k pretrig: e- π n evts: <u>1439</u>	SHMS prescale <u>117</u> k pretrig: Σ e- π n evts: <u>4639</u>	COIN pretrig: <u>55</u> k ☒ Data ok ☐ Junk
Comments: <u>scruffy Beam @ 20 nA</u>							

Run Number: <u>15142</u>	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: <u>9</u> PS2: <u>/</u> PS3: <u>/</u> PS4: <u>6</u> PS5: <u>0</u> PS6: <u>/</u> Mode10: <u>60</u> / fadc	Start time (RC GUI): <u>2:39:16</u> Stop time (RC GUI): <u>3:34:16</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale <u>93</u> k pretrig: e- π n evts: <u>1270</u>	SHMS prescale <u>102</u> k pretrig: Σ e- π n evts: <u>4909</u>	COIN pretrig: <u>48</u> k ☒ Data ok ☐ Junk
Comments:							

Run Number: <u>15143</u>	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: <u>9</u> PS2: <u>/</u> PS3: <u>/</u> PS4: <u>6</u> PS5: <u>0</u> PS6: <u>/</u> Mode10: <u>60</u> / fadc	Start time (RC GUI): <u>3:48:08</u> Stop time (RC GUI): <u>4:56:55</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale <u>124</u> k pretrig: e- π n evts: <u>1673</u>	SHMS prescale <u>136</u> k pretrig: Σ e- π n evts: <u>7582</u>	COIN pretrig: <u>58</u> k ☒ Data ok ☐ Junk
Comments:							

Run Number: <u>15144</u>	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: <u>9</u> PS2: <u>/</u> PS3: <u>/</u> PS4: <u>6</u> PS5: <u>0</u> PS6: <u>/</u> Mode10: <u>60</u> / fadc	Start time (RC GUI): <u>4:57:36</u> Stop time (RC GUI): <u>6:04:31</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale <u>106</u> k pretrig: e- π n evts: <u>7509</u>	SHMS prescale <u>116</u> k pretrig: Σ e- π n evts: <u>9091</u>	COIN pretrig: <u>58</u> k ☒ Data ok ☐ Junk
Comments:							

Run Number: <u>15145</u>	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: <u>9</u> PS2: <u>/</u> PS3: <u>/</u> PS4: <u>6</u> PS5: <u>0</u> PS6: <u>/</u> Mode10: <u>60</u> / fadc	Start time (RC GUI): <u>6:05:07</u> Stop time (RC GUI): <u>7:02:42</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale <u>107</u> k pretrig: e- π n evts: <u>1470</u>	SHMS prescale <u>118</u> k pretrig: Σ e- π n evts: <u>10561</u>	COIN pretrig: <u>53</u> k ☒ Data ok ☐ Junk
Comments:							

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yy mm dd

Initials: NH

Continuation of Configuration:

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

$Q^2 = 6.00$, $W = 2.4$, $x = 0.53$
high e , θ_{miss} left

Run Number: 15146	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: <u>9</u> PS2: <u>1</u> PS3: <u>6</u> PS4: <u>6</u> PS5: <u>0</u> PS6: <u>0</u> Mode10: cer / fadc	Start time (RC GUI): <u>8:03:32</u> Stop time (RC GUI): <u>8:55</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale <u>82</u> k SHMS prescale <u>90</u> k e- π n evts: <u>1119</u> Σ e- π n evts: <u>11680</u>	COIN pretrig: <u>45</u> k ☒ Data ok ☐ Junk
Comments:						

Run Number: 15147	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: <u>9</u> PS2: <u>1</u> PS3: <u>1</u> PS4: <u>6</u> PS5: <u>0</u> PS6: <u>0</u> Mode10: cer / fadc	Start time (RC GUI): <u>09:59:45</u> Stop time (RC GUI): <u>10:59:21</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale <u>47</u> k SHMS prescale <u>51</u> k e- π n evts: <u>619</u> Σ e- π n evts: <u>12299</u>	COIN pretrig: <u>36</u> k ☒ Data ok ☐ Junk
Comments:						

Run Number: 15148	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: <u>9</u> PS2: <u>1</u> PS3: <u>1</u> PS4: <u>6</u> PS5: <u>0</u> PS6: <u>0</u> Mode10: cer / fadc	Start time (RC GUI): <u>10:59:58</u> Stop time (RC GUI): <u>11:59:28</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale <u>62</u> k SHMS prescale <u>68</u> k e- π n evts: <u>810</u> Σ e- π n evts: <u>13109</u>	COIN pretrig: <u>46</u> k ☒ Data ok ☐ Junk
Comments:						

Run Number: 15149	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: <u>0</u> PS2: <u>1</u> PS3: <u>0</u> PS4: <u>1</u> PS5: <u>1</u> PS6: <u>1</u> Mode10: cer / fadc	Start time (RC GUI): <u>12:29:07</u> Stop time (RC GUI): <u>13:02:09</u>	☒ Settings Verified? ☒ HV OK? ☒ 50k OK?	HMS prescale ____ k SHMS prescale ____ k e- π n evts: ____ Σ e- π n evts: ____	COIN pretrig: ____ k ☐ Data ok ☒ Junk
Comments: Cosmic, HMS DC threshold 5.8V						

Run Number: 15150	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: <u>0</u> PS2: <u>1</u> PS3: <u>0</u> PS4: <u>1</u> PS5: <u>1</u> PS6: <u>1</u> Mode10: cer / fadc	Start time (RC GUI): <u>13:06:05</u> Stop time (RC GUI): <u>13:37:56</u>	☐ Settings Verified? ☐ HV OK? ☐ 50k OK?	HMS prescale ____ k SHMS prescale ____ k e- π n evts: ____ Σ e- π n evts: ____	COIN pretrig: ____ k ☐ Data ok ☐ Junk
Comments: Cosmic, HMS DC Threshold 6V						

Run Number: 15151	☐ LH2 10cm ☒ LD2 10cm ☐ Dummy 10cm ☐ C 0.5% r.l. ☐ Optics ____ cm ☐ _____	PS1: <u>0</u> PS2: <u>1</u> PS3: <u>0</u> PS4: <u>1</u> PS5: <u>1</u> PS6: <u>1</u> Mode10: cer / fadc	Start time (RC GUI): <u>13:42:29</u> Stop time (RC GUI): <u>13:44:06</u>	☐ Settings Verified? ☐ HV OK? ☐ 50k OK?	HMS prescale ____ k SHMS prescale ____ k e- π n evts: ____ Σ e- π n evts: ____	COIN pretrig: ____ k ☐ Data ok ☐ Junk
Comments: Cosmic, HMS DC Threshold 5.8V						