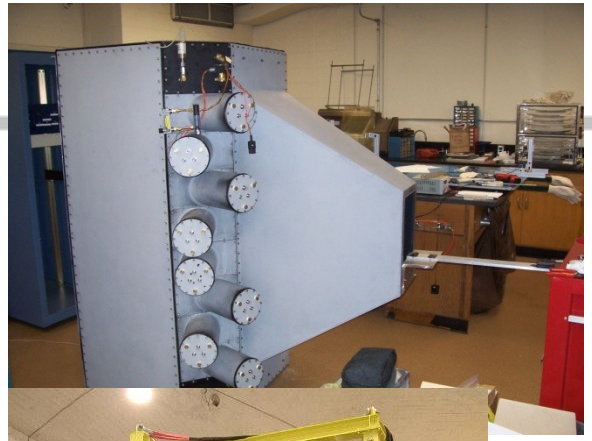
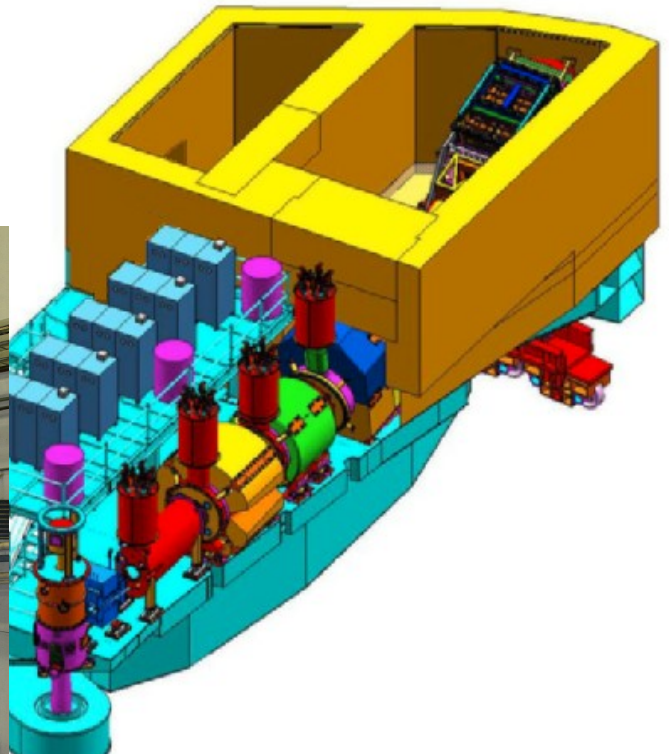
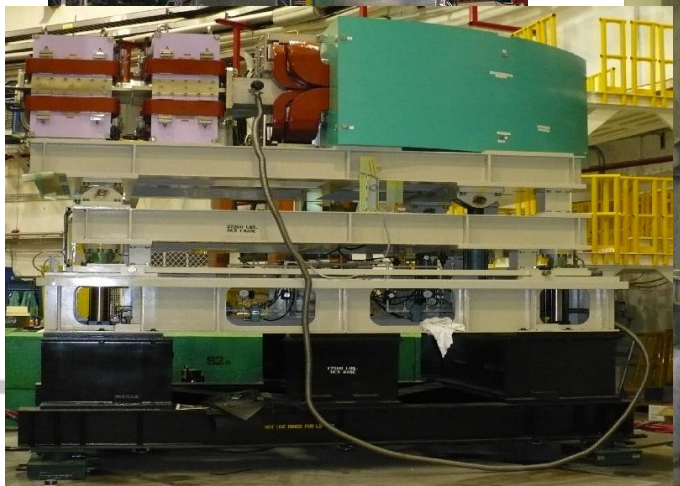


Hall C Users Meeting

January 30, 2009





Experiments completed in last year

Exp	Title	Spokespersons
E04-019	Two-Photon exchange in e-p elastic using recoil polarization	R. Gilman, L. Pentchev, C. Perdrisat, R. Suleiman
E07-002	Polarization Transfer in Wide Angle Compton Scattering	R. Gilman, A. Nathan, B. Wojtsekhowski
E04-108	Measurement of G_{Ep}/G_{Mp} to Q^2 = 9 GeV^2 via Recoil Polarization in Hall C	E. Brash, M. Jones, C. Perdrisat, V. Punjabi

SANE

Had Planed to run 2.5 of four experiments with similar setup

E07-003: “SANE” g1 & g2 at Q = 4 GeV

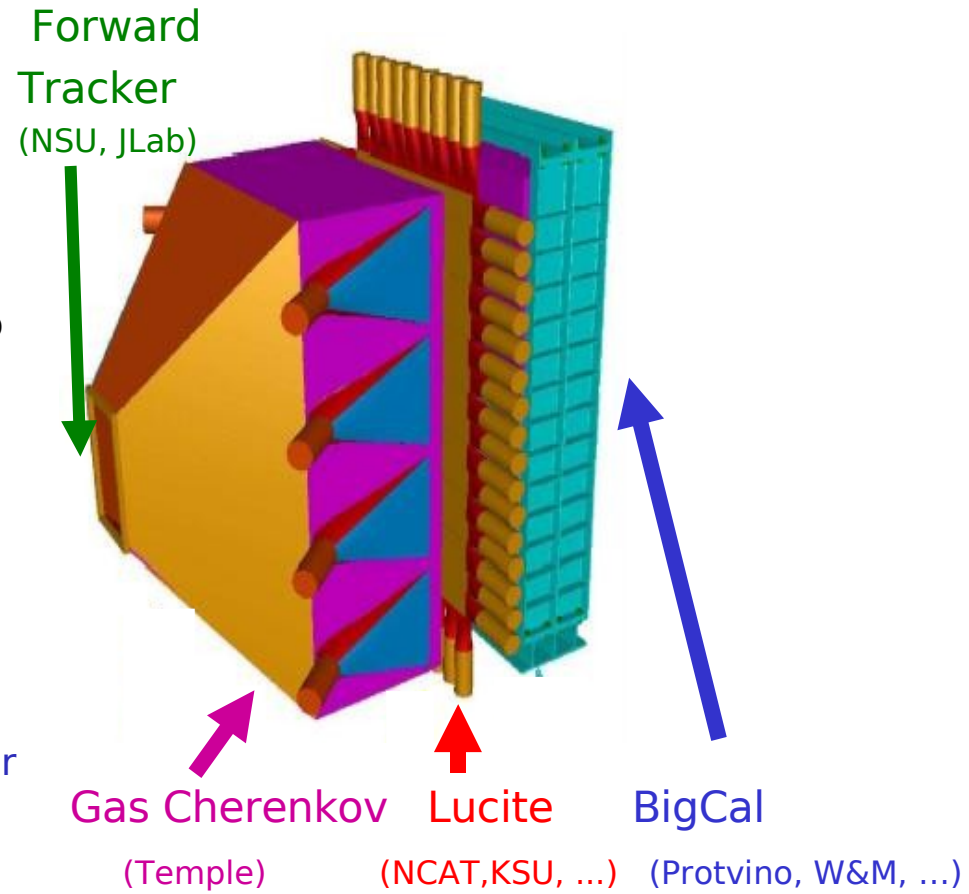
E07-011: g1d/F1 Deuteron spin structure

E04-113 : semi-SANE d(e,e’h) - parasitic to g1d

E05-101: Helicity Correlations in Compton Scattering

Current Plan:

Run SANE with ~90% of proposed perpendicular kinematics and ~70% of parallel kinematics.



Hall C Approved Experiment Summary

Large Installation Experiments (8 experiments, 314 days + 25 C3):

E07-003	Spin Asymmetries on the Nucleon Experiment	34 days	A
E05-101	Helicity Correlations in Wide-Angle Compton Scattering	14 days	A-
E07-011	A High Precision Measurement of g1d/F1d	8 days (20)	A
E04-113	Semi-SANE (PAC blessed parasitic running)	parasitic	
E08-016	The Qweak Experiment: A Search for Physics at the TeV Scale via a Meas. of the Proton's Weak Charge	198 days	A
E05-115	Spectroscopic Investigation of Hypernuclei in … (II)	20 days	A-
E08-002	Additional beam request to E05-115	18 days	B+ (C3)
E08-012	Study of Light Hypernuclei by Pionic Decay at JLab	5 days	A- (C3)

Color coding indicates experiments using similar apparatus

Schedule to 12 GeV Shutdown

October 22-January 23, 2009
E07-003 - Spin Asymmetries on the Nucleon Experiment

January 31, 2009-March 1, 2009
E07-011 – A High Precision Measurement of g1d/F1d
E04-113 – Semi-SANE, runs parasitic to E07-011?

January 16, 2009-March 11, 2009
E07-003 - Spin Asymmetries on the Nucleon Experiment

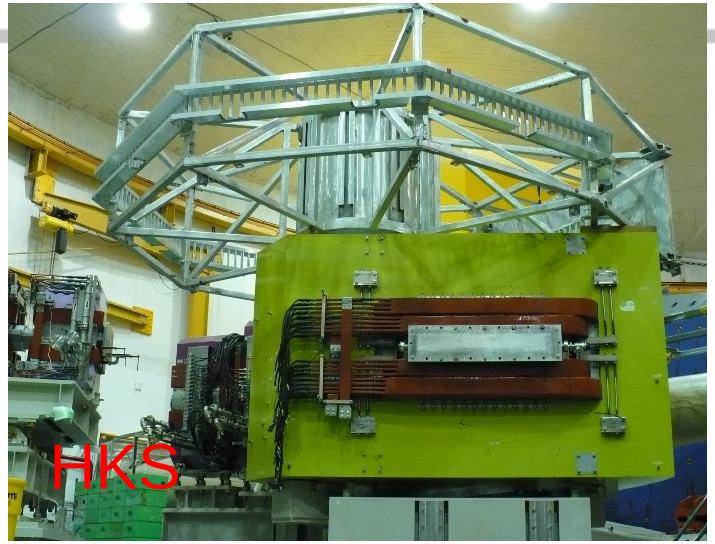
March 12, 2009-August 21, 2009 (5.5 month install)
HES/HKS Installation

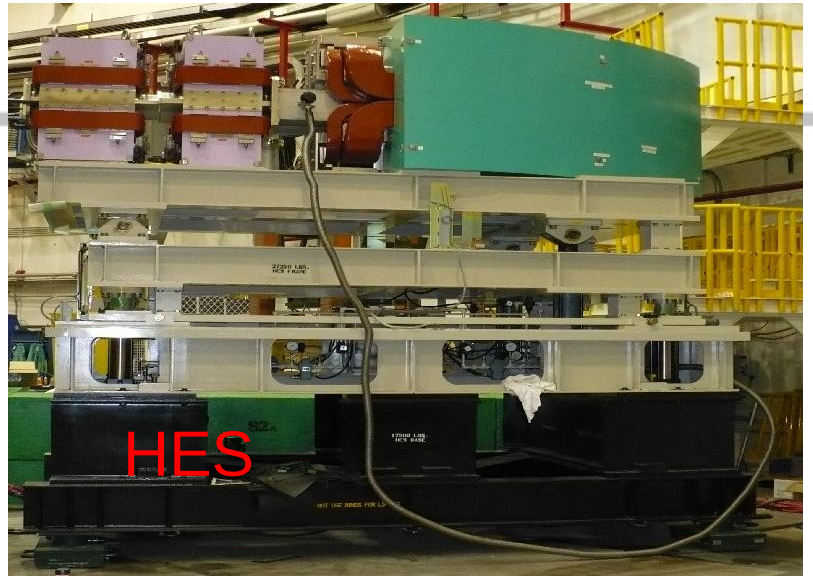
August 21, 2009-October 19, 2009 (2 m floor time)
HES/HKS Run
E02-017 parasitic (Fission chamber)

October 20, 2009 – May 14, 2012 (2.5 year)
7 months installation
Qweak installation and run

Assumptions:

1. Run SANE, g1d, HKS, Qweak
2. 2.5 years for Qweak, which includes
   7 month install, and
   6 month accelerator down


HKS


HES


STOP


LOCKWOOD

Region 3 Rotator Assembly in Hall C

Rotator Superstructure Held by Crane

Partially Assembled in Hall C

Publications in last year

E03-008	Search for Sub-threshold Photoproduction of J/Psi Mesons	PRC 79, 015209
E01-107	Scaling Study of the Pion Electroproduction Cross Section and Pion Form Factor	PRC 78, 058201
F_π	Study of the charged pion form factor between Q^2=0.60 and 2.45 GeV^2, part I: Measurements of the cross section for the ^{1}H(e,e',π^+)n reaction	PRC 78, 045202
F_π	Study of the charged pion form factor between Q^2=0.60 and 2.45 GeV^2, part II: Determination of, and results for, the pion form factor	PRC 78, 045203
E01-108	Transverse momentum dependence of semi-inclusive pion production	PLB 665, 20
	Empirical Fit to Inelastic Electron-Deuteron and Electron-Neutron Resonance Region Transverse Cross Sections	PRC 77, 065206
E00-006	G^0 Electronics and Data Acquisition (Forward-Angle Measurements)	NIM A586, 251

Submitted: Inclusive ep fits, eta production-S11, associated fission of Bi
Future: Spin Structure Moments, Delta transition @ high Q^2, EMC effect, x>1, G0 backward, G0 NIM, Hypernuclear

Total Publications: 73 PRL: 28 NIM: 10

Top 10 Cited Hall C Papers

Spires	PR	Rating	Exp.	Reference	Title
173	68	B+	E93-021	PRL 86, 1713 (2001)	Charged Pion Form Factor
135	64	B+	E94-014	PRL 82, 45 (1999)	Electroproduction of Delta at High Momentum Transfer
105	61	A	E00-006	PRL 95, 092001 (2005)	G0 Forward
99	55			PRL 85, 1186 (2000)	Verification of Quark-Hadron Duality
92	45			PRL 85, 1182 (2000)	Valencelike Quark-Hadron Duality
91	41	A	E93-026	PRL 87, 081801 (2001)	GeN Q^2=0.5 GeV/c^2, polarized target
85	27	A-	E89-012	PRL 81, 4576 (1998)	Deuteron photodisintegration to 4 GeV
78	38	B+	E94-110	PRC 70, 015206 (2004)	ep elastic cross section 0.4 < Q^2 < 5.5 GeV/c^2
73	38	A	E93-038	PRL 91, 122002 (2003)	GeN Q^2=1.45 GeV/c^2, recoil polarimetry
70	40	A-	E94-018	PRL 84, 5053 (2000)	t_{20}

Top 8 Cited >= 2004

Spires	PR	Rating	Exp.	Reference	Title
105	61	A	E00-006	PRL 95, 092001 (2005)	G0 Forward
78	38	B+	E94-110	PRC 70, 015206 (2004)	ep elastic cross section $0.4 < Q^2 < 5.5$ GeV/c^2
64	51		E93-038	PhyRep 406, 127 (2005)	Quark-hadron duality
56	31	A	E93-026	PRL 84, 5053 (2000)	GeN Q^2=0.5, 1.0 GeV/c^2, polarized target
48	29	A-	E01-004	PRL 97, 192001 (2006)	Pion Form Factor Q2 = 1.6, 2.45 GeV/c2
46	23	B+	E93-021	PRC 75, 055205 (2007)	Pion Form Factor Q2 = 0.60-1.60 GeV/c2
34	14			PRL 97, 102002 (2006)	Nucleon Strange and Anapole Form Factors
31	17	A-	E97-006	PRL 93, 182501 (2004)	Correlated Strength in Spectral Functions

http://hallcweb.jlab.org/publications/citations.php

Notes

- JSA Support Deadline – February 15
  - JSA Sabbatical/Research Leave
    - Two position available
    - SURA member universities
    - http://www.jsallc.org/IF/Sabbaticals.html
  - JSA/JLab Graduate Fellowship Program
    - 8 awards available
    - SURA member universities
    - ½ of RA stipend + $2K for travel
    - http://www.jsallc.org/IF/Fellowships.html

- Conference travel support for students available through User Group

Notes

- Hall C Staff Scientist I or II position open:
  - Apply on JLab website
  - Hope to open second position if budget allows

- Hall C Web information:
  - Document Database
    - Please submit conference slides and proceedings papers
  - Publications list
    - http://hallcweb.jlab.org/publications/
    - Submit corrections to saw@jlab.org
  - PhD Thesis Listing
    - http://www1.jlab.org/ul/generic_reports/thesis.cfm
    - Submit corrections to eljones@jlab.org

Collaboration Manpower

- Large installation experiments
  - Experts get overworked
  - Trouble staffing shifts

- Manpower for HKS and Qweak
  - Encourage people to join
  - Encourage collaborations to be accepting
  - Examined during readiness reviews

Please upload/test slides during breaks

NEED Session Chairs!

NEED Session Chairs!

Party 7PM at usual place