

# Jefferson Lab 12GeV Experiments, Grouped By Category

## *Fundamental Symmetries: Approved*

<u>Experiment</u>	<u>Hall</u>	<u>Title</u>	<u>Spokesperson</u>	<u>Institutions</u>	<u>Beam Days</u>	<u>Rating</u>
E-09-005	A	An Ultra-precise Measurement of the Weak Mixing Angle using Moller Scattering	K. Kumar	U Mass	344	A
E-10-007	A	Precision Measurement of Parity-Violation in Deep Inelastic Scattering Over a Broad Kinematic Range	P. Souder	Syracuse U	169	A
E-10-011	D	A Precision Measurement of the eta Radiative Decay Width via the Primakoff Effect	L. Gan A. Gasparian*	NCAT State U	79	A-

# Jefferson Lab 12GeV Experiments, Grouped By Category

## *Hadrons and cold nuclear matter: Approved*

<u>Experiment</u>	<u>Hall</u>	<u>Title</u>	<u>Spokesperson</u>	<u>Institutions</u>	<u>Beam Days</u>	<u>Rating</u>
E-06-105	C	Inclusive Scattering from Nuclei at $x > 1$ in the quasielastic and deeply inelastic regimes	J. Arrington D. Day* P. Solvignon-Slifer	ANL U of Virginia U of NH	32	A-
E-06-106	B	Study of Color Transparency in Exclusive Vector Meson Electroproduction off Nuclei	L. El Fassi K. Hafidi* M. Holtrop B. Mustapha	ODU ANL U of NH ANL	60	B+
E-06-107	C	The Search for Color Transparency at 12 GeV	D. Dutta* R. Ent	JLab	26	B+
E-06-117	B	Quark Propagation and Hadron Formation	W. Brooks* G. Gilfoyle K. Hafidi H. Hakobyan R. Holt M. Holtrop B. Mustapha M. Ungaro L. Weinstein* M. Wood	U of Richmond ANL Yerevan ANL U of NH ANL JLab ODU USCA	60	A-
E-10-003	C	Deuteron Electro-Disintegration at Very High Missing Momentum	W. Boeglin* M. Jones	FIU JLab	21	B+
E-10-008	C	Detailed studies of the nuclear dependence of F2 in light nuclei.	J. Arrington A. Daniel* D. Gaskell	ANL U of Virginia JLab	23	A-
E-11-002	C	Proton Recoil Polarization in the $4\text{He}(e,e'p)3\text{H}$ , $2\text{H}(e,e'p)n$ , and $1\text{H}(e,e'p)$ Reactions	E. Brash D. Day C. Djalali R. Ent D. Gaskell S. Gilad R. Gilman	CNU U of Virginia USC JLab JLab MIT Rutgers U	37	B+

				S. Strauch*	USC		
E-11-101	A	PREX-II: Precision Parity-Violating Measurement of the Neutron Skin of Lead	K. Kumar K. Paschke	U Mass U of Virginia	35	A	
E-11-107	C	In Medium Nucleon Structure Functions, SRC, and the EMC effect	S. Gilad O. Hen* L. Weinstein S. Wood	MIT ODU JLab	40	B+	
E-11-112	A	Precision measurement of the isospin dependence in the 2N and 3N short range correlation region	J. Arrington D. Day D. Higinbotham P. Solvignon-Slifer*	ANL U of Virginia JLab U of NH	19	A-	
E-12-006	A	Near Threshold Electroproduction of J/Psi at 11 GeV	K. Hafidi Z. E. Meziani* X. Qian X. Qian N. Sparveris J. Zhou	ANL Temple U Duke U MIT	60	A-	
E-12-004	A	CREX: PARITY-VIOLATING MEASUREMENT of the WEAK CHARGE DISTRIBUTION of $^{48}\text{Ca}$ to 0.02 fm ACCURACY	J. Mammei D. McNulty K. Paschke S. Riordan* P. Souder	U Manitoba ISU U of Virginia U Mass Syracuse U	45	A-	
E-13-005	Inj	Measurement of $^{16}\text{O}^{(3,\pm)}\text{^{12}C}$ with a bubblechamber and a bremsstrahlung beam	R. Suleiman	JLab	14	A-	

# Jefferson Lab 12GeV Experiments, Grouped By Category

## *The 3D structure of the hadrons: Approved*

<u>Experiment</u>	<u>Hall</u>	<u>Title</u>	<u>Spokesperson</u>	<u>Institutions</u>	<u>Beam Days</u>	<u>Rating</u>
E-09-018	A	Measurement of the Semi-Inclusive pi and kappa electro-production in DIS regime from transversely polarized 3He target with the SBS&BB spectrometers in Hall A	G. Cates E. Cisbani G. Franklin B. Wojtsekhowski*	U of Virginia INFN CMU JLab	64	A-
E-06-108	B	Hard Exclusive Electroproduction of pi0 and eta with CLAS12	K. Joo V. Kubarovsky P. Stoler* M. Ungaro C. Weiss	U of Conn JLab RPI JLab JLab	80	B
E-06-112	B	Probing the Proton's Quark Dynamics in Semi-Inclusive Pion Production at 12 GeV	H. Avagyan* K. Joo Z. E. Meziani B. Seitz	JLab U of Conn Temple U Glasgow U	60	A
E-06-114	A	Measurements of Electron-Helicity Dependent Cross Sections of Deeply Virtual Compton Scattering with CEBAF at 12 GeV	A. Camsonne C. Hyde* C. Munoz Camacho J. Roche	JLab ODU IPN ORSAY Ohio U	100	A
E-06-119	B	Deeply Virtual Compton Scattering with CLAS at 11 GeV	A. Biselli H. Egiyan L. Elouadrhiri M. Holtrop D. Ireland W. Kim F. Sabatie*	JLab JLab U of NH Kyungpook Nat. U	200	A
E-07-105	C	Scaling Study of the L-T Separated Pion Electroproduction Cross Section at 11 GeV	T. Horn* G. Huber	CUA U of Regina	36	A-
E-07-107	B	Studies of Spin-Orbit Correlations with Longitudinally Polarized Target	H. Avagyan* P. Bosted K. Griffioen K. Hafidi P. Rossi	JLab W&M W&M ANL JLab	103	A-

E-09-008	B	Studies of the Boer-Mulders Asymmetry in Kaon Electroproduction with Hydrogen and Deuterium Targets	H. Avagyan* M. Contalbrigo K. Joo Z. E. Meziani B. Seitz	JLab INFN U of Conn Temple U Glasgow U	56	A-
E-09-009	B	Studies of Spin-Orbit Correlations in Kaon Electroproduction in DIS with polarized hydrogen and deuterium targets	H. Avagyan* E. Cisbani K. Griffioen K. Hafidi P. Rossi	JLab INFN W&M ANL JLab	103	B+
E-09-011	C	Studies of the L-T Separated Kaon Electroproduction Cross Section from 5-11 GeV	T. Horn* G. Huber P. Markowitz	CUA U of Regina FIU	40	B+
E-09-017	C	Transverse Momentum Dependence of Semi-Inclusive Pion Production	P. Bosted R. Ent* H. Mkrtychyan	W&M JLab	32	A-
E-10-006	A	An update to PR12-09-014: Target Single Spin Asymmetry in Semi-Inclusive Deep-Inelastic Electro Pion Production on a Transversely Polarized $^3\text{He}$ Target at 8.8 and 11 GeV	J. P. Chen H. Gao* X. Jiang J. C. Peng X. Qian	JLab Duke U LANL U of Illinois Duke U	90	A
E-11-003	B	Deeply Virtual Compton Scattering on the Neutron with CLAS12 at 11 GeV	S. Niccolai* D. Sokhan	IPN ORSAY Glasgow U	90	A
E-11-007	A	Asymmetries in Semi-Inclusive Deep-Inelastic Electro-Production of Charged Pion on a Longitudinally Polarized He-3 Target at 8.8 and 11 GeV	J. P. Chen Y. Qiang W. Yan	JLab JLab	35	A
E-11-108	A	Target Single Spin Asymmetry in Semi-Inclusive Deep-Inelastic ( $e, e'\pi^{\pm}$ ) Reaction on a Transversely Polarized Proton Target	K. Allada J. P. Chen H. Gao* Z. E. Meziani	Hampton U JLab Duke U Temple U	120	A
E-12-001	B	Timelike Compton Scattering and $J/\psi$ photoproduction on the proton in $e+e^-$ pair production with CLAS12 at 11 GeV	M. Guidal T. Horn P. Nadel-Turonski* R. Paredon S. Stepanyan	IPN ORSAY CUA JLab IPN ORSAY JLab	120	A-
E-12-007	B	Exclusive Phi Meson Electroproduction with CLAS12	F. X. Girod-Gard M. Guidal V. Kubarovskiy P. Stoler* C. Weiss*	JLab IPN ORSAY JLab RPI JLab	60	B+

E-13-010 C Exclusive Deeply Virtual Compton and Neutral Pion Cross-Section Measurements in Hall C

T. Horn CUA  
C. Munoz Camacho\* IPN ORSAY  
R. Parenduyan IPN ORSAY

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## *The longitudinal structure of the hadrons: Approved*

<u>Experiment</u>	<u>Hall</u>	<u>Title</u>	<u>Spokesperson</u>	<u>Institutions</u>	<u>Beam Days</u>	<u>Rating</u>
E-06-104	C	Measurement of the Ratio $R = \sigma_L / \sigma_T$ in Semi-Inclusive Deep-Inelastic Scattering	P. Bosted R. Ent* H. Mkrtchyan	W&M JLab	40	A-
E-06-109	B	The Longitudinal Spin Structure of the Nucleon	D. Crabb A. Deur K. Dharmawardane T. Forest K. Griffioen M. Holtrop S. Kuhn* Y. Prok	U of Virginia JLab JLab ISU W&M U of NH ODU ODU	80	A
E-06-110	C	Measurement of Neutron Spin Asymmetry $A_{1n}$ in the Valence Quark Region Using an 11 GeV Beam and a Polarized $^3\text{He}$ Target in Hall C	G. Cates J. P. Chen Z. E. Meziani X. Zheng*	U of Virginia JLab Temple U U of Virginia	36	A
E-06-121	C	A Path to 'Color Polarizabilities' in the Neutron: A Precision Measurement of the Neutron $g_2$ and $d_2$ at High $Q^2$ in Hall C	T. Averett W. Korsch Z. E. Meziani B. Sawatzky*	W&M U of Kentucky Temple U JLab	29	A-
E-06-122	A	Measurement of neutron asymmetry $A_{1n}$ in the valence quark region using 8.8 GeV and 6.6 GeV beam energies and Bigbite spectrometer in Hall A	J. Annand T. Averett G. Cates N. Liyanage Z. E. Meziani G. Rosner B. Wojtsekhowski* X. Zheng	W&M U of Virginia U of Virginia Temple U Glasgow U JLab U of Virginia	23	A-
E-10-002	C	Precision measurements of the $F_2$ structure function at large $x$ in the resonance region and beyond	M. Christy C. Keppel S. Malace* M. Niculescu	Hampton U JLab JLab JMU	13	B+

E-06-113	B	The Structure of the Free Neutron at Large x-Bjorken	S. Bueltmann* M. Christy H. Fenker K. Griffioen C. Keppel S. Kuhn W. Melnitchouk V. Tvaskis	ODU Hampton U JLab W&M JLab ODU JLab U Manitoba	40	A
E-10-103	A	Measurement of the F <sub>2n</sub> /F <sub>2p</sub> , d/u Ratios and A=3 EMC Effect in Deep Inelastic Scattering off the Tritium and Helium Mirror Nuclei	J. Annand J. Gomez R. Holt G. Petratos* R. Ransome	JLab ANL Kent State U Rutgers U	42	A
E-09-002	C	Precise Measurement of pi <sup>+</sup> /pi <sup>-</sup> Ratios in Semi-inclusive Deep Inelastic Scattering PartI: Charge Symmetry violating Quark Distributions	D. Dutta D. Gaskell K. Hafidi*	JLab ANL	22	A-
E-09-007	B	Studies of partonic distributions using semi-inclusive production of kaons	H. Avagyan F. Benmokhtar A. El Alaoui K. Hafidi* m. mirazita	JLab ANL ANL INFN	110	A-
E-13-007	C	Measurement of Semi-Inclusive $\Lambda_c$ Production as Validation of Factorization	R. Ent* T. Horn H. Mkrtchyan V. Tadevosyan	JLab CUA Yerevan	25	A-

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*Withdrawn*

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PR12-09-006	C	The Neutron Electric Form Factor at $Q^2$ up to $7 \sim (\text{GeV}/c)^2$ from the Reaction $^2\text{H}(\vec{e}, e\vec{n})^1\text{H}$ via Recoil Polarimetry	B. Anderson J. Arrington S. Kowalski R. Madey B. Plaster A. Semenov*	LTU ANL MIT Kent State U CIT U of Regina	66	

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PR12-09-017-	C	Transverse Momentum Dependence of Semi-Inclusive Pion Production	P. Bosted R. Ent* H. Mkrтчyan	W&M JLab		

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*Replaced*

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PR12-12-008	B	Photoproduction of the Very Strangest Baryons on a Proton Target in CLAS12	L. Guo* E. Pasyuk I. Strakovski D. Watts V. Ziegler	FIU JLab GWU U of Edinburgh JLab		