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Publications:

FICTION

Here, Eyeball This! (novel) , David Heddle, Saga Books, 2005.

Postdestination (short story), David Heddle, Whortleberry Press, 2005.

TECHNICAL

Radiative decays of the $\Sigma^0(1385)$ and $\Lambda(1520)$ hyperons, S. Taylor, ... D. Heddle, ... (CLAS Collaboration), Phys. Rev. C **71**, 054609 (2005).

Exclusive Photoproduction of the Cascade Ξ Hyperons, J. W. Price, ... D. Heddle, ... (CLAS Collaboration), Phys. Rev. C **71**, 058201 (2005).

Onset of Asymptotic Scaling in Deuteron Photodisintegration, P. Rossi, ... D. Heddle, ... (CLAS Collaboration), Phys. Rev. Lett. **94**, 012301 (2005).

Complete measurement of three-body photodisintegration of ^3He for photon energies between 0.35 and 1.55 GeV, S. Niccolai, ... D. Heddle, ... (CLAS Collaboration), Phys. Rev. C **70**, 064003 (2004).

Measurement of the polarized structure function σ_{LT} for $p(\bar{e}, e' \pi^+)n$ in the $\Delta(1232)$ resonance region, K. Joo, ... D. Heddle, ... (CLAS Collaboration), Phys. Rev. C **70**, 042201R (2004).

Observation of an Exotic Baryon with $S = +1$ Photoproduction from the Proton, V. Kubarovsky, ... D. Heddle, ... (CLAS Collaboration), Phys. Rev. Lett. **92**, 032001 (2004).

Hyperon photoproduction in the nucleon resonance region, J. W. C. McNabb, ... D. Heddle, ... (CLAS Collaboration), Phys. Rev. C **69**, 042201R (2004)

Tensor polarization of the ϕ meson photoproduced at high t , K. McCormick, ... D. Heddle, ... (CLAS Collaboration), Phys. Rev. C **69**, 032203R (2004).

Proton Source Size Measurements in the $eA \rightarrow e'ppX$ Reaction, A. V. Stavinsky, K. R. Mikhailov, R. Lednický, A. V. Vlassov, ... D. Heddle, ... (CLAS Collaboration), Phys. Rev. Lett. **93**, 192301 (2004).

Complete Angular Distribution Measurements of Two-Body Deuteron Photodisintegration between 0.5 and 3 GeV, M. Mirazita, ... D. Heddle, ... (CLAS Collaboration), Phys. Rev. C **70**, 014005 (2004).

Observation of an Exotic Baryon $S = +1$ Baryon in Photoproduction from the Proton, V. Kubarovskiy, L. Guo, ... D. Heddle, ... (CLAS Collaboration), Phys. Rev. Lett. **92**, 032001 (2004).

Tensor Polarization of the ϕ meson photoproduced at high t , K. McCormick, ... D. Heddle, ... (CLAS Collaboration), Phys. Rev. C **69**, 032203 (2004)

Two-Nucleon Momentum Distributions Measured in ${}^3\text{He}(e, e'pp)n$, R. A. Niyazov, ... D. Heddle, ... (CLAS Collaboration), Phys. Rev. Lett. **92**, 052303 (2004).

Observation of an Exotic $S = +1$ Baryon in Exclusive Photoproduction from the Deuteron, S. Stepanyan, ... D. Heddle, ... (CLAS Collaboration), Phys. Rev. Lett. **91**, 252001 (2003).

Measurement of the Proton Spin Structure Function $g_1(x, Q^2)$ for Q^2 from 0.15 to 1.6 GeV^2 with CLAS, R. Fatemi, ... D. Heddle, ... (CLAS Collaboration), Phys. Rev. Lett. **91**, 222002 (2003).

$ep \rightarrow e'p\pi^0$ reaction studied in the $\Delta(1232)$ mass region using polarization asymmetries, A. Biselli, ... D. Heddle, ... (CLAS Collaboration), Phys. Rev. C **68**, 035202 (2003)

Observation of Nuclear Scaling in the $A(e, e')$ reaction at $x_B > 1$, K. Sh. Egiyan, ... D. Heddle, ... (CLAS Collaboration), Phys. Rev. C, **68**, 014313 (2003).

Measurement of $ep \rightarrow e'p\pi^+\pi^-$ and Baryon Resonance Analysis, M. Ripani, ... D. Heddle, ... (CLAS Collaboration), Phys. Rev. Lett. **91**, 022002 (2003).

Measurement of inclusive spin structure functions of the deuteron, J. Yun, ... D. Heddle, ... (CLAS Collaboration), Phys. Rev. C, **67**, 055204 (2003).

The CEBAF Large Acceptance Spectrometer (CLAS), B. Mecking, ... D. Heddle, ... (CLAS Collaboration), Nuclear Instruments and Methods A **503/3**, 513 (2003).

First Measurement of Transferred Polarization in the Exclusive $e(\text{pol})p \rightarrow e'K^+\Lambda(\text{pol})$ Reaction, D. S. Carman, ... D. Heddle, ... (CLAS Collaboration), Phys. Rev. Lett. **90**, 131804 (2003).

Kinematically complete measurement of the proton structure function F_2 in the resonance region and evaluation of its moments, M. Osipenko, ... D. Heddle, ... (CLAS Collaboration), Phys. Rev. D, **67**, 092001 (2003).

Photoproduction of the ω Meson on the Proton at Large Momentum Transfer, M. Battaglieri, ... D. Heddle, ... (CLAS Collaboration), Phys. Rev. Lett. **90**, 022002 (2003).

η Photoproduction on the Proton for Photon Energies from 0.75 to 1.95 GeV, M. Dugger, ... D. Heddle, ... (CLAS Collaboration), Phys. Rev. Lett. **89**, 222002 (2002).

First Measurement of the Double Spin Asymmetry in $e(\text{pol})p(\text{pol}) \rightarrow e'\pi^+n$ in the Resonance Region, R. DeVita, ... D. Heddle, ... (CLAS Collaboration), Phys. Rev. Lett. **88**, 082001 (2002).

Q^2 Dependence of Quadrupole Strength in the $\gamma^*p \rightarrow \Delta^+(1232) \rightarrow p\pi^0$ Transition, K. Joo, ... D. Heddle, ... (CLAS Collaboration), Phys. Rev. Lett. **88**, 122001 (2002).

Photoproduction of the ρ^0 meson on the proton at large momentum transfer, M. Battaglieri, ... D. Heddle, ... (CLAS Collaboration), Phys. Rev. Lett. **87**, 172002 (2001).

Electroproduction of the $\Lambda(1520)$ Hyperon, S. Barrow, ... D. Heddle, ... (CLAS Collaboration), Phys. Rev. C **64**, 044601 (2001).

Observation of exclusive deeply virtual Compton scattering in polarized electron beam asymmetry measurements, S. Stepanyan, ... D. Heddle, ... (CLAS Collaboration), Phys. Rev. Lett. **87**, 182002 (2001).

Exclusive electroproduction of ϕ mesons at 4.2 GeV, K. Lukashin, ... D. Heddle, ... (CLAS Collaboration), Phys. Rev. C **63**, 065205 (2001).

The $ep \rightarrow e'p(\eta)$ reaction at and above the S11(1535) baryon resonance, R. Thompson, ... D. Heddle, ... (CLAS Collaboration), Phys. Rev. Lett. **86**, 1702 (2001).

Photoproduction of $\phi(1020)$ Mesons on the Proton at Large Momentum Transfer., E. Anciant, ... D. Heddle, ... (CLAS Collaboration), Phys. Rev. Lett. **85**, 4682 (2000).

Robert F. Hodson, David C. Doughty, David P. Heddle, "Combining Synchronous and Asynchronous Learning Networks in Engineering", Proceedings of ASEE Conference on Distance Learning June 1999.

D. P. Heddle, "The Hot Views Graphical Library", Dr. Dobb's Journal, **92**, May 1998.

D. Doughty, D. P. Heddle, R. Hodson, and C. Watson, Java based tools for use in physics collaborations", Computing in High Energy Physics (CHEP), 1997.

D. P. Heddle, "Hv: A Graphical User Interface Library for use in Scientific and Engineering Applications", Computers in Physics (Peer Reviewed Journal Section), **10**, 174 (1996).

Sergui Boyarinov, Dieter Cords, D. P. Heddle, Graham Heyes, and Vladimir Serov, "Building CLAS Events in the Read-Out-Controllers and CODA-EVB Level", CLAS 96-007 (1996).

D. P. Heddle, "Hv Programming Manual", CLAS 95-026 (1995).

Dieter Cords, D. P. Heddle, Etienne Burtin, and Bogdan Niczyporuk, "CLAS Geometry Database and BOS Banks", CLAS 95-002 (1995).

David C. Doughty Jr., D. P. Heddle, and David Allgood, "Data Compression and Readout of Multiplexed Drift Chamber Data in the CLAS Detector at CEBAF", Proceedings of the Computing in High Energy Physics (CHEP 94), 448, 1994.

Dieter Cords, Larry Dennis, D. P. Heddle and Bogdan Niczyporuk, "CLAS Event Format with BOS", CLAS 94-012 (1994).

D. P. Heddle and Larry Dennis, "Using the ced Library", CLAS 94-002 (1994).

D. A. Engwall, B. M. Dunham, L. S. Cardman, D. P. Heddle, and C. K. Sinclair, "A Spin Manipulator For Electron Accelerators", Nuclear Instruments and Methods in Physics Research, **A324**, 409, (1993).

D. P. Heddle and Larry Dennis, "CLAS Event Format v. 2.0", CLAS 93-002 (1993).

P. Dragovitsch and D. P. Heddle, "Software Development for the CEBAF Hall B Experimental Area", CEBAF 1992 Summer Workshop, AIP Conference Proceedings No. **269**, 499 (1993).

D. P. Heddle and Leonard Maximon, "LASPE: a Subroutine for Generating Straggling Distributions for Positrons and Electrons", Computer Physics Communications, **70**, 77 (1992).

P. Dragovitsch, D. P. Heddle, L. Dennis, and B. Freedom, "Preliminary Data Analysis Computer Design for the CLAS Detector", FSU-SCRI-19-182 (1991).

F. Hartline, L. Dorries, R. Caton, D. P. Heddle, C. Colonna, J. Webb, G. Webb, and L. Abrahamson, "A Class-room Communications System: Humanizing a Large Class by means of Computers", Proceedings of the National Conference on Computers on Campus, University of South Carolina, (1991).

D. P. Heddle and L. Crawford, "C Programming Standards for CLAS Software", CLAS 90-011 (1990).

D. P. Heddle and Leonard Maximon, "Corrections for Landau Straggling for Positrons and Electrons", *Physical Review C*, **40**, 1632 (1989).

D. P. Heddle, "NPLMenus 2.0", DECUS, (Aug., 1989).

D. P. Heddle, "ST SciPlot: Scientific Graphics for the ST", START, (Nov., 1989).

D. P. Heddle, "Zero'th Order Design Considerations for a Dispersion Matching Mask", University of Illinois NPL TR87-61 (1987).

D. P. Heddle, "Achromatic Spectrometer Transport", University of Illinois NPL TR87-60 (1987).

D. P. Heddle, "Calculation of the Position of the Effective Edges of the New (NBS) End Magnets", University of Illinois NPL TR86-59 (1986).

D. P. Heddle and L. S. Kisslinger, "Hybrid quark-hadron model of Λ nonmesonic decay in nuclei: finite nuclei", *Physical Review C*, **33**, 608, (1986).

D. P. Heddle, Y. R. Kwon and F. Tabakin, "BOPIT: Coulomb plus Strong Interaction Bound States, Momentum Space Solutions", *Computer Physics Communications*, **38**, 71, (1986).

D. P. Heddle and L. S. Kisslinger, "Six-quark Probabilities in Hyperon-Nucleon Scattering", *Physical Review C*, **30**, 965, (1984).

C. Y. Cheung, D. P. Heddle, and L. S. Kisslinger, "Hybrid Quark Model of Λ nonmesonic decay in nuclei", *Physical Review C*, **27**, 335, (1983).