# Rusty S. Towell

Curriculum Vitae

| **Degrees** | **Institution** | **Date** |
|---|---|---|
| Ph.D. | University of Texas, Austin, Texas | March 1999 |
| B.S. | Abilene Christian University, Abilene, Texas | May 1990 |

| **Professional Experience** | | |
|---|---|---|
| Postdoctoral Research Associate | Los Alamos National Laboratory | 1999 - present |
| Research Assistant | Abilene Christian University | 1994-1999 |
| Teaching Assistant | University of Texas | 1994-1996 |
| Instructor | Naval Nuclear Power School | 1990-1994 |

**Publications in Journals**

R.S. Towell, P.L. McGaughey, T.C. Awes, M.E. Beddo, M.L. Brooks, C.N. Brown, J.D. Bush, T.A. Carey, T.H. Chang, W.E. Cooper, C.A. Gagliardi, G.T. Garvey, D.F. Geesaman, E.A. Hawker, X.C. He, L.D. Isenhower, D.M. Kaplan, S.B. Kaufman, P.N. Kirk, D.D. Koetke, G. Kyle, D.M. Lee, W.M. Lee, M.J. Leitch, N. Makins, J.M. Moss, B.A. Mueller, P.M. Nord, V. Papavassiliou, B.K. Park, J.C. Peng, G. Petitt, P.E. Reimer, M.E. Sadler, W.E. Sondheim, P.W. Stankus, T.N. Thompson, R.E. Tribble, M.A. Vasiliev, Y.C. Wang, Z.F. Wang, J.C. Webb, J.L. Willis, D.K. Wise, G.R. Young, *Improved Measurement of the $\bar{d}/\bar{u}$ Asymmetry in the Nucleon Sea*, (To Be submitted to Phys. Rev. D).

The PHENIX Collaboration (K. Adcox *et al.*), *Centrality Dependence of Charged Particle Multiplicity in Au-Au Collisions at $\sqrt{s_{NN}} = 130$ GeV*, (accepted for publication in Phys. Rev. Lett.).

C.N. Brown, T.C. Awes, M.E. Beddo, M.L. Brooks, J.D. Bush, T.A. Carey, T.H. Chang, W.E. Cooper, C.A. Gagliardi, G.T. Garvey, D.F. Geesaman, E.A. Hawker, X.C. He, L.D. Isenhower, D.M. Kaplan, S.B. Kaufman, P.N. Kirk, D.D. Koetke, G. Kyle, D.M. Lee, W.M. Lee, M.J. Leitch, N. Makins, P.L. McGaughey, J.M. Moss, B.A. Mueller, P.M. Nord, V. Papavassiliou, B.K. Park, J.C. Peng, G. Petitt, P.E. Reimer, M.E. Sadler, W.E. Sondheim, P.W. Stankus, T.N. Thompson, R.S. Towell, R.E. Tribble M.A. Vasiliev, J.C. Webb, J.L. Willis, D.K. Wise, G.R. Young, *Observation of Polarization in Bottomonium Production at $\sqrt{s} = 38.8$ GeV*, (accepted for publication in Phys. Rev. Lett.).

M.J. Leitch, W.M. Lee, M.E. Beddo, C.N. Brown, T.A. Carey, T.H. Chang, W.E. Cooper, C.A. Gagliardi, G.T. Garvey, D.F. Geesaman, E.A. Hawker, X.C. He, L.D. Isenhower, D.M. Kaplan, S.B. Kaufman, D.D. Koetke, P.L. McGaughey, J.M. Moss, B.A. Mueller, V. Papavassiliou, J.C. Peng, G. Petitt, P.E. Reimer, M.E. Sadler, W.E. Sondheim, P.W. Stankus, R.S. Towell, R.E. Tribble, M.A. Vasiliev, J.C. Webb, J.L. Willis, G.R. Young, *Measurement of Differences Between $J/\psi$ and $\psi'$ Suppression in p-A Collisions*, Phys. Rev. Lett. **84** 3256 (2000).

M.A. Vasiliev, M.E. Beddo, C.N. Brown, T.A. Carey, T.H. Chang, W.E. Cooper, C.A. Gagliardi, G.T. Garvey, D.F. Geesaman, E.A. Hawker, X.C. He, L.D. Isenhower, D.M. Kaplan, S.B. Kaufman, D.D. Koetke, W.M. Lee, M.J. Leitch, P.L. McGaughey, J.M. Moss, B.A. Mueller, V. Papavassiliou, J.C. Peng, G. Petitt, P.E. Reimer, M.E. Sadler, W.E. Sondheim, P.W. Stankus, R.S. Towell, R.E. Tribble, J.C. Webb, J.L. Willis, G.R. Young, *Parton Energy Loss Limits and Shadowing in Drell-Yan Dimuon Production*, Phys. Rev. Lett. **83** 2304 (1999).

J.C. Peng, G.T. Garvey, T.C. Awes, M.E. Beddo, M.L. Brooks, C.N. Brown, J.D. Bush, T.A. Carey, T.H. Chang, W.E. Cooper, C.A. Gagliardi, D.F. Geesaman, E.A. Hawker, X.C. He, L.D. Isenhower, D.M. Kaplan, S.B. Kaufman, P.N. Kirk, D.D. Koetke, G. Kyle, D.M. Lee, W.M. Lee, M.J. Leitch, N. Makins, P.L. McGaughey, J.M. Moss, B.A. Mueller, P.M. Nord, V. Papavassiliou, B.K. Park, G. Petitt, P.E. Reimer, M.E. Sadler, W.E. Sondheim, P.W. Stankus, T.N. Thompson, R.S. Towell, R.E. Tribble M.A. Vasiliev, Y.C. Wang, Z.F. Wang, J.C. Webb, J.L. Willis, D.K. Wise, G.R. Young, *$\bar{d}/\bar{u}$ Asymmetry and the Origin of the Nucleon Sea*, Phys. Rev. D **58** 092004 (1998).

E.A. Hawker, T.C. Awes, M.E. Beddo, C.N. Brown, J.D. Bush, T.A. Carey, T.H. Chang, W.E. Cooper, C.A. Gagliardi, G.T. Garvey, D.F. Geesaman, X.C. He, L.D. Isenhower, D.M. Kaplan, S.B. Kaufman, P.N. Kirk, D.D. Koetke, G. Kyle, D.M. Lee, W.M. Lee, M.J. Leitch, N. Makins, P.L. McGaughey, J.M. Moss, B.A. Mueller, P.M. Nord, V. Papavassiliou, B.K. Park, J.C. Peng, G. Petitt, P.E. Reimer, M.E. Sadler, J. Selden, W.E. Sondheim, P.W. Stankus, T.N. Thompson, R.S. Towell, R.E. Tribble, M.A. Vasiliev, Y.C. Wang, Z.F. Wang, J.C. Webb, J.L. Willis, D.K. Wise, G.R. Young, *Measurement of the Flavor Asymmetry in the Nucleon Sea*, Phys. Rev. Lett. **80** 3715 (1998).

## Conference and Workshop Presentations

R.S. Towell, *Physics with the Muon Arms of PHENIX at RHIC,* QCD in a Nuclear Environment, Regensburg, Germany, August, 2000.

R.S. Towell, *Nuclear Effects in Di-lepton Production in FNAL E866/NuSea,* Workshop on Hard Processes and RHIC Physics, Los Alamos National Laboratory, June, 2000.

R.S. Towell, *Nuclear Suppression of Vector Meson Production in FNAL E866/NuSea,* International Europhysics Confernce on High Energy Physics '99, Tampere, Finland, **High Energy Physics '99**, K. Huitu, H. Kurki-Suonio, and J. Maalampi, eds. (2000).

R.S. Towell, *Measurement of the Antiquark Flavor Asymmetry in the Nucleon Sea,* International Europhysics Confernce on High Energy Physics '99, Tampere, Finland, **High Energy Physics '99**, K. Huitu, H. Kurki-Suonio, and J. Maalampi, eds. (2000).

R.S. Towell, *Measurement of the Flavor Asymmetry in the Nucleon Sea,* Fall Meeting, Division of Nuclear Physics, American Physical Society, 28-31 October, 1998, Bull. Am. Phys. Soc. **43** 1575 (1998).

R.S. Towell, *Measurement of the Flavor Asymmetry in the Nucleon Sea,* Fall Meeting, Texas Sections of the APS/AAPT/SPS, 15-17 October, 1998.

R.S. Towell *et al.*, *New Results from Fermilab E866: Flavor Asymmetry in the Nucleon Sea and Nuclear Effects in $J/\psi$ Production,* **XXXIII'nd Moriond Conference: '98 QCD and High Energy Hadronic Interactions,** J. Tran Thanh Van, ed., Moriond, France, March 1998 (Editions Frontiere, 1998)

R.S. Towell, *Measuring $\bar{d}/\bar{u}$ in the Proton: Fermilab E866,* **AIP Conference Proceedings 407:**

**Deep Inelastic Scattering and QCD, $5^{th}$ International Conference,** J. Repond and D. Krakauer, eds., Chicago, April, 1997 (Woodbury, NY: AIP Press, 1997) 423.

R.S. Towell *et al.*, *Measurements of the Differential Cross Sections for $\pi^- + p \rightarrow \pi^0 + n$ Near 0° and 180° Using the LAMPF $\pi^0$ Spectrometer,* **Third International Symposium on Pion-Nucleon and Nucleon-Nucleon Physics,** Gatchina, USSR, April 1989.

## Invited Seminars

*Measurement of the Antiquark Flavor Asymmetry in the Nucleon Sea,* Physics Seminar, University of Texas, Austin, Texas, 12 March 1999.

*Measurement of the Flavor Asymmetry in the Nucleon Sea,* Physics Division Medium Energy Physics Seminar, Argonne National Laboratory, Argonne, Illinois, 9 February 1999.

*FNAL E866/NuSea: Measurement of the Flavor Asymmetry in the Nucleon Sea,* P-25 Seminar, Los Alamos National Laboratory, Los Alamos, NM, 13 January 1999.

*Measurement of the Flavor Asymmetry in the Nucleon Sea,* Journal Club, Cornell University, Ithaca, NY, 23 October 1998.

*Measurement of the Flavor Asymmetry in the Nucleon Sea: Results from E866 at Fermilab,* Particle Physics Seminar, Brookhaven National Laboratory, Upton, New York, 22 September 1998.

*Recent Results from Fermilab E866: Measurement of the Flavor Asymmetry in the Nucleon Sea and Nuclear Effects in $J/\psi$ Production,* Physics Seminar, Abilene Christian University, Abilene, Texas, 2 April 1998.

*New Results from Fermilab E866: Flavor Asymmetry in the Nucleon Sea and Nuclear Effects in $J/\psi$ Production,* CERN Heavy Ion Forum, CERN, Geneva, Switzerland, 20 March 1998.

*Measurement of the Flavor Asymmetry in the Nucleon Sea,* High Energy Nuclear Physics Seminar, University of Texas, Austin, Texas, 26 February 1998.

*Measuring the $\bar{u}/\bar{d}$ Asymmetry in the Proton Sea: Fermilab E866* Wideband Seminar, Fermi National Accelerator Laboratory, Batavia, Illinois, 14 August 1997.

*NuSea (E866) Measuring the $\bar{d}(x)/\bar{u}(x)$ Asymmetry in the Proton* KTeV Seminar, Fermi National Accelerator Laboratory, Batavia, Illinois, 27 March 1997.

*NuSea (E866) Measuring $\bar{d}(x)/\bar{u}(x)$ in the Proton* Physics Seminar, University of Texas, Austin, Texas, 7 November 1996.

## Publications in Conference Proceedings

C.A. Gagliardi *et al.*, *Light Antiquark Flavor Asymmetry in the Nucleon Sea*, PANIC '99, Nucl. Phys. A663 284 (2000).

R.E. Tribble *et al.*, *Nuclear Dependence of Drell-Yan and $J/\psi$ production in FNAL E866* PANIC '99, Nucl. Phys. A663 761 (2000).

B.A. Mueller *et al.*, *Measurement of the Light Quark Flavor Asymmetry in the Nucleon Sea.* Bloomington, 'Physics with a high luminosity polarized electron ion collider' 174 (1999).

M.J. Leitch *et al.*, *$J/\psi$ and $\psi'$ suppression in P A collisions at 800 GeV/c*, QM '99, Nucl. Phys. A661 554 (1999).

W.M. Lee *et al.*, *Nuclear Dependence of $J/\psi$ and $\psi'$ Production*, Heavy Ion Physics from BeValac to RHIC: Proceedings of the Heavy Ion Mini-Symposium at the APS Centennial Meeting, Atlanta, March, 1999, R. Seto, ed., (World Scientific, 1999).

C.A. Gagliardi *et al.*, *$\bar{d}/\bar{u}$ Asymmetry in the Nucleon Sea,* INPC'98, Nucl. Phys. A 654, 487 (1999), Paris, France, Aug, 1998.

W.M. Lee *et al.*, INPC'98, Nucl. Phys. A 654, 623 (1999), Paris, France, Aug, 1998.

C.A. Gagliardi *et al.*, *$\bar{d}/\bar{u}$ Asymmetry in the Nucleon Sea,* XIV ISHEPP, Dubna, Russia, Aug, 1998.

M.J. Leitch *et al.*, *Vector Meson Production and Nuclear Effects in FNAL E866,* XIV ISHEPP, Dubna, Russia, Aug, 1998.

J.C. Peng *et al.*, *Measurements of the Light Quark Flavor Asymmetry in the Nucleon Sea,* ICHEP 98, Vancouver, B.C., Canada, July, 1998.

M.A. Vasiliev *et al.*, *Measurement of the Flavor Asymmetry in the Nucleon Sea,* Proc. Thirteenth Lake Louise Winter Institute, "Quantum Chromodyanmics", ed. by A. astbury, B.A. Campbell, F.C. Khanna, J.L. Pinfold and M. Vetterli, (World Scientific, Singapore, 1999), 314.

R.E. Tribble *et al.*, *Measurement of the $\bar{u}/\bar{d}$ Asymmetry in the Proton,* ISS97, Tashkent, Oct, 1997.

P.E. Reimer *et al.*, *A Preliminary Measurement of the $\overline{u}/\overline{d}$ Asymmetry in the Proton Sea,* **AIP Conference Proceedings 412: Intersections between Particle and Nuclear Physics,** T.W. Donnelly, ed., Big Sky, Montana, May 1997 (Woodbury, NY: AIP Press, 1997) 643.

E.A. Hawker *et al.*, *Measuring the $\bar{u}/\bar{d}$ Asymmetry in the Proton Sea: Fermilab E866*, **XXXII'nd Moriond Conference: '97 QCD and High Energy Hadronic Interactions,** J. Tran Thanh Van, ed., Moriond, France, March 1998 (Editions Frontiere, 1998) 387.