# Dr. David Bixler - Curriculum Vitae

#### **Work Addreess**

Physics Department Angelo State University San Angelo, TX 76909 (325) 942-2524 x225

### Education

Ph.D., Physics, July 1998, Rice University, Houston, Texas.

Thesis: "The Dynamics of Neutralization of Electron-Spin-Polarized <sup>4</sup>He<sup>+</sup> Ions at Surfaces", GPA: 4.0/4.0

M.A., Physics, April 1995, Rice University, Houston, Texas.

Thesis: "Optical Manipulation of He(2<sup>3</sup>S) Atoms with a Diode Laser", GPA: 4.0/4.0

B.S., Physics and Mathematics, May 1992, Tarleton State University, Stephenville, Texas. GPA: 4.0/4.0

### **Professional Experience**

ANGELO STATE UNIVERSITY, San Angelo, Texas.

August 1998 – August 2004 Assistant Professor of Physics, September 2004 – Present Associate Professor of Physics.

RICE UNIVERSITY, Houston, Texas.

August 1992 - July 1998 Teaching and Research Assistant

### **Grant History**

- Office of Naval Research, (administered through Texas State University, San Marcos; locally directed by Toni Sauncy), "Heterofunctional Materials." \$300,000 (2009).
- Texas Teacher Quality Grant, Type B (with Dr. Andy Wallace and Ms. Amy Rutherford), "Physics Teacher Quality." \$209,441 (2009)
- Texas Teacher Quality Grant, Type B (with Dr. Andy Wallace and Ms. Amy Rutherford), "Physics and Technology." \$86,604.00 (2008)
- Texas Teacher Quality Grant, Type B (with Dr. Andy Wallace and Ms. Amy Rutherford), "Physics and Technology." \$90,915.00 (2007)
- ASU Technology Enhancement Grant (with Dr. Andy Wallace), "Advancing Technology and Inquiry in Fundamentals of Physics I and II." \$9985.34 (2006)
- Bridging II TAKS Materials Grant: "K-8 Properties of Matter" and "K-5 Light and Optics." (2004)

- Texas Teacher Quality Grant, Type B (with Dr. Andy Wallace and Ms. Shelley Abernathy), "IPC/TEKS: Learning Experiences with Meaningful Applications," \$78,412.00 (2004).
- ASU Faculty Development Grant, "Standards-Based Alignment of the Advanced Physical Science Curriculum," \$10,000.00 (2004).
- ASU Technology Enhancement Grant, "Online Testing in Astronomy I and II," \$3800.00 (2003).
- ASU Technology Enhancement Grant, "Inquiry-Based Physics II," \$7300.00 (2002).
- Sigma Xi Grant in Aid of Research (with student Chris Tiftickjian), "Software for Molecular Structure Calculations," (2001). Not Funded.
- National Science Foundation CCLI-A&I grant, "Inquiry-Based Introductory Physics at Angelo State University," DUE#0126989, (2001). Not Funded.
- National Science Foundation Major Research Instrumentation Grant, "Acquisition of Instrumentation to Establish an Optical and Electrical Materials Characterization Facility for Undergraduate Research," (Dr. Toni Sauncy, Principal Investigator and Drs. Andrew Wallace and David Bixler, Co-Principal Investigators), MRI#0116095, \$112,000.00 (2001).
- ASU Faculty Development Grant, "Incorporation of Modern Educational Pedagogy into the Introductory Physical Science Laboratory," \$10,000.00 (2001).
- ASU Faculty Development Travel Grant, \$760.50 to travel to the National Conference on Undergraduate Research, Lexington KY, March 2001.
- Sigma Xi Grant in Aid of Research (with student Stephen Raif), "Frequency Stabilization of an Infrared Laser," \$700.00 (2001).
- Southwest Consortium for the Improvement of Mathematics and Science Teaching Materials Grant, \$9582.43 (2000-2004).
- Planned Learning and Infusion of Technology Throughout Teacher Education (PLAIT) "Incorporation of Instructional Technology into Advanced Physical Science," \$4000.00 (2000).
- ASU Technology Enhancement Grant (with Dr. Andrew Wallace), "Inquiry-Based Physics," \$9000.00 (2000).
- Sigma Xi Grant in Aid of Research (with student Sarah Swaim), "Software for the Analysis of Electron Exchange Interactions," \$175.00 (2000).
- ASU Research Enhancement Grant, "Absolute Cross Section Determination of Electron Capture by Proton Impact on Gases," \$9000.00 (1999).
- Twelve ASU Carr Research Scholarship Grants: Karianne Thomas 2008; Denis Myasishchev 2008; Morgan Lynch 2007; Margaret Hubbell (with Dr. Richard Thurlkill) 2006; Munir Pirbhai 2005; Emiliano Garcia 2003; Kremena Geneva (with Dr. Bonnie Amos) 2003; Justin Block 2002; Aaron Hoelscher 2002; Chris Tiftickjian 2001; Stephen Raif 2000; Sarah Swaim 1999;

## **Student Research Activity**

Armando Nava, "Electronics Laboratory," Spring 2010. Seth Fisher, "Physics in the Public Schools," Spring 2010. Nelson Simpson, "Electromagnetic Propulsion," Spring 2010. Matt Dane, "Environmental Studies with XRF," Spring 2010. Juan Olvera (Carr Research Scholar), "X-Ray Fluorescence of Archaeological Samples," Fall 2009 and Spring 2010.

Henry Schreiner, "Advanced Quantum Physics," Fall 2009.

Sterling Beeson, "X-Ray Fluorescence," Summer 2009.

Daniel Bullock and James Matthews, "Particle Physics," Spring 2009.

Karianne Thomas (Carr Research Scholar), "Ultraviolet Photography," Fall 2008 and Spring 2009.

Denis Myasishchev (Carr Research Scholar), "Chaos Theory," Fall 2008 and Spring 2009.

James Matthews, "Advanced Quantum Mechanics," Fall 2008.

Daniel Bullock, "A Virtual Particle Model," Fall 2008.

John Pokorny, "Wireless Signaling," Spring 2008.

Morgan Lynch (Carr Research Scholar), "Quantum Field Theory," Fall 2007 and Spring 2008.

Jennifer Hendryx, "XRF Spectroscopy," Fall 2007 and Spring 2008.

Jeremy Swanson, "Mechanical Robotics," Fall 2007.

Matt Naul, "Robotics," Fall 2007.

Margaret Hubbell (Carr Research Scholar), "Molecular Modeling," Fall 2006 and Spring 2007.

Morgan Lynch, "Advanced Quantum Mechanics," Fall 2006 and Spring 2007.

Munir Pirbhai (Carr Research Scholar), "Spectral Patterns of Ultraviolet Reflection from Flowers," Fall 2005 and Spring 2006.

Michael Hadley, "Proton Interaction with Gas Targets," Fall 2004.

Gary Wells, "Diesel Engine Conversion," Fall 2004.

Kremena Gineva (Carr Research Scholar), "Floral Spectral Analysis of the Threatened Chisos Mountain Hedgehog Cactus," Fall 2003 and Spring 2004.

Emiliano Garcia (Carr Research Scholar), "Studies of Photon Emission after Electron Capture during Proton collision with Gases," Fall 2003 and Spring 2004.

Alex Cornelius, "Construction of An Argon Laser," Fall 2003.

Karen Robertson, "Accelerator Automation using LabVIEW," Spring 2003.

Aaron Hoelscher (Carr Research Scholar), "Cross Section of Electron Capture by Proton Impact on Gasses," Fall 2002 and Spring 2003.

Justin Block (Carr Research Scholar), "Semiconductor Laser Line-width Narrowing using an External Cavity," Fall 2002 and Spring 2003.

Paul Wilson, "Electronics Control Systems," Fall 2002.

Brian McGonagill, "Web-Based Assessment," Summer 2002.

David Alvarado, "Mathematical Functions and Operators," Spring 2002.

Chris Tiftickjian (Carr Research Scholar), "Electronic Structure of Borane Reagents and Predication of Synthetic Reaction Mechanisms," Fall 2001 and Spring 2002.

Lucas Phinney, "Proton Impact on Gas Targets," Fall 2001.

Stephen Raif (Carr Research Scholar), "A Frequency Stabilized Diode Laser System," Fall 2000 and Spring 2001.

Oscar Sanchez, "Radiation Physics Laboratory Development," Fall 2000.

David Alvarado, "Classification of Mathematical Functions," Fall 2000.

Melissa Righetti, "Instructional Technology," Summer 2000.

Bart Carter, "Electromagnetic Propulsion," Spring 2000.

Stephen Hill, "Electronics for Semiconductor Laser Control," Spring 2000.

Sarah Swaim (Carr Research Scholar), "Absolute Cross Section Determination of Electron Exchange Interactions during Proton Impact on Gases," Fall 1999 and Spring 2000.

Hardin Dunham, "Proton Impact Cross-Section Experiments," Summer 1999. Chris Tiftickjian, "Proton Impact Cross-Section Experiments," Summer 1999.

### **Professional Affiliations**

American Association of Physics Teachers (1998-present).

Texas Association of College Teachers (1998-present).

Texas Academy of Science (2001-present).

## **Professional and Community Service**

Chemical Inventory Software Selection Committee, 2009-present.

Angelo State University Liason for the Santa Rita Elementary and Fort Concho Elementary Science Nights, 2008-present.

Strategic Planning: Environmental Scanning Committee, 2009-present.

Library Committee, 2007-present.

Academic Excellence Committee, 2007-present.

Science Contest Director for UIL Region I-AAAA, 1998-2008.

Chair of the Physics section of the Texas Academy of Science,

2001-2002 and 2003-2008

The E. James Holland Symposium on American Values Organizing Committee: Honor Society Luncheon Director, 1999-present.

University Tenure and Promotion Committee 2005-2008

College of Sciences Mission Statement Committee 2006-2007

Elementary Education NCATE Committee 2006-2007

Travel Process Committee 2006.

Texas Section Physics Spring Meeting Planning Committee 2005-2006

Research Enhancement Committee, 2000-2006.

Academic Excellence Committee, 2000-2006.

Honors Program: Development Committee, 2000-2002; Honors Council, 2002-2006.

Academic Master Plan "Goal One" Committee (2005).

Faculty Senate, 2003-2005.

External Affairs Committee, Chair, 2003-2005.

Library Committee, 2002-2005.

Director of the Eisenhower National Clearinghouse Regional Access Center, 1999-present.

Member of the Graduate Faculty, 1999-present;

Faculty advisor or co-advisor of the following ASU student organizations:

The Sigma Pi Sigma Physics Honor Society, 1999-present.

The Alpha Chi National Honor Society, 1999-2009.

Animayhem 2005-2006.

Angelo State University Laser Safety Officer, 1998-present.

Physics Department Search Committees:

Tenure Track (Physics) 1998-1999; Visiting (Physics) 1999;

Tenure Track (Physics) 1999-2000; Tenure Track (Physics) 2000-2001;

Visiting (Physics) 2001; Tenure Track (Physics) 2001-2002;

Visiting (Geology) 2002; Tenure Track (Geology) 2002-2003;

Tenure Track (Physics) 2002-2003; Visiting (Physics) 2003;

Tenure Track (Physics) 2003-2004; Visiting (Physics) 2004;

Tenure Track (Physics) 2004-2005; Visiting (Physics) 2005;

Tenure Track (Geology) 2006-2007; Tenure Track (Geology) 2007-2008;

Tenure Track (Physics, 2 openings) 2007-2008; Tenure Track (Geology) 2009.

District Science Fair Judge (2006).

Consulting: with Dr. Carolyn Mason in the Physical Therapy Department concerning a circuit needed in her research (2005-2006), and with Dr. Trey Smith concerning the choreography of his play "Antimatter" (2005).

Book Review of the textbook "Essential University Physics" by Richard Wolfson (2005).

Collaborator with the Southwest Consortium for Improvement of Math and Science Teaching (SCIMAST), 1999-2005.

Teaching of Physical Activity 1125: Archery, Fall 2001, Fall 2002 and Fall 2004. College of Sciences Curriculum Committee, 2002-2003.

### **Awards and Honors**

ASU Step Promotion, 2008.

ASU Rank Promotion, 2004.

Tenure awarded at ASU, 2004.

ASU Step Promotion, 2001.

Sigma Pi Sigma Physics Honor Society, inducted 1991.

Alpha Chi Honor Society, inducted 1990.

Phi Eta Sigma Freshman Honor Society, inducted 1989.

## **Publications**

David Bixler and Christian Poppeliers, *Advanced Physical Science*, volume 2, Angelo State University, January 2008.

David Bixler, *Advanced Physical Science*, volume 1, Angelo State University, August 2004.

David Bixler, *Physics 1301/1302 Online Testing Software with Automatic Gradebook*, Angelo State University, June 2003.

Website: http://physics.angelo.edu/cgi-bin/Quizzes/mainpage.pl

David Bixler and Andrew Wallace, *Physics 2342 Online Homework Code*, Angelo State University, June 2002.

Website: http://physics.angelo.edu/cgi-bin/2342/

David Bixler and Toni Sauncy, *Introductory Physical Science Laboratory Experiences*, vol. 2, Angelo State University, 2002.

D. L. Bixler, *Electronic Instruments Laboratory Manual*, Campus Custom Publishing, 2001.

Toni Sauncy and David Bixler, *Introductory Physical Science Laboratory Experiences*, vol. 1, Angelo State University, 2001.

Andrew Wallace and David Bixler, *Physics 1331 Online Homework Code*, Angelo State University, June 2000.

Website: http://physics.angelo.edu/cgi-bin/1441/

- D. L. Bixler, J. C. Lancaster, F. J. Kontour, P. Nordlander, F. B. Dunning and G. K. Walters, "Spin Dependent Studies of the Dynamics of He+ Ion Neutralization at a Au(100) Surface," Phys. Rev. B 60, 12, 9082 (1999).
- D. L. Bixler, J. C. Lancaster, F. J. Kontour, P. Nordlander, G. K. Walters, and F. B. Dunning, "Use of Spin-Labeling Techniques to Probe the Dynamics of He+ Ion Neutralization at Clean Metal Surfaces," Nucl. Inst. Meth. B 157, 68 (1999).
- D. L. Bixler, J. C. Lancaster, F. J. Kontour, F. B. Dunning and G. K. Walters, "An Improved Electron-Spin-Polarized 4He+ Ion Source," Rev. Sci. Instrum. 70, 1, 240 (1999).
- D. L. Bixler, J. C. Lancaster, R. A. Popple, F. B. Dunning and G. K. Walters, "Low-Energy, Electron-Spin-Polarized <sup>4</sup>He<sup>+</sup> Ion Source," Rev. Sci. Instrum., 69, 5, 2012 (1998).

# **Presentations**

- David Bixler and Andrew Wallace, "Hands on Force and Motion," Conference for the Advancement of Science Teaching, Galveston, TX, November 2009.
- David Bixler and Andrew Wallace, "Hands on Electricity and Magnetism," Conference for the Advancement of Science Teaching, Ft. Worth, TX, November 2008.
- David Bixler, *et al*, "Physics Education Round Table," American Physical Society Texas Section Meeting, Corpus Christi, TX, March 2008.
- S. Abernathy, A. Wallace, and D. Bixler, "Building a Light Box," American Association of Physics Teachers Texas Section Meeting, San Angelo, Texas, March 2006.
- A. Wallace and D. L. Bixler, "Inquiry-Based Physics for Preservice Science Teachers," American Association of Physics Teachers National Meeting, Madison, Wisconsin, August 2003.
- David Bixler, "Sixteen IPC Equations from the TAKS," SCIMAST Workshop, San Angelo, Texas, July 2003.
- David Bixler and Mark Sonntag, "Observational Astronomy," SCIMAST Workshop, San Angelo, Texas, June 2003.
- D. Bixler, "Atomic Physics," Texas Pre-Freshman Engineering Program, San Angelo, Texas, June 2003.
- D. Bixler and A. Wallace, "Inquiry-Based Introductory Physics at Angelo State University," American Association of Physics Teachers National Meeting, Austin, Texas, January 2003.
- David Bixler and Mark Sonntag, "Observational Astronomy," SCIMAST Workshop, San Angelo, Texas, June 2002.
- David Bixler, "Communications Technology," SCIMAST Workshop, San Angelo, Texas, June 2002.
- D. Bixler, "Atomic Physics," Texas Pre-Freshman Engineering Program, San Angelo, Texas, June 2002.
- David Bixler, "Computer Based Laboratories," Regional Collaborative Workshop, San Angelo, Texas, May 2002.
- D. Bixler and C. Tiftickjian, "Computation of the Electronic Structure of Borane Reagents," Annual Meeting of the Texas Academy of Science, Laredo, Texas, February 2002.

- D. Bixler and Joel Callaway, Children's Program: FOX Kid's Club "Science Week," January 2002.
- D. Bixler, "An Introduction to the ENC Access Center at Angelo State University," TEES Math and Science Conference, San Angelo, TX October 2001.
- David Bixler, "Coin Collecting," ASU Faculty Luncheon, San Angelo, TX, September 2001.
- David Bixler, "Technology in the Classroom," SCIMAST Workshop, San Angelo, Texas, July 2001.
- David Bixler, "Science Activities for Elementary and Middle Schools," Texas Rural Systemic Initiative Annual Meeting, San Angelo, TX, June 2001.
- Jarvis Hampton and David Bixler, "Internet Resources for Teachers," Texas Rural Systemic Initiative Annual Meeting, San Angelo, TX, June 2001.
- D. Bixler, "Atomic Physics," Texas Pre-Freshman Engineering Program, San Angelo, Texas, June 2001.
- D. L. Bixler "Undergraduate Research with a Proton Accelerator," National Conference on Undergraduate Research, Lexington, KY, March 2001.
- A. B. Wallace and D. L. Bixler, "Inquiry-Based Physics," American Association of Physics Teachers National Meeting, San Diego, CA, January 2001.
- D. L. Bixler, "Studies of Charge Exchange Interactions in Proton Collisions with Gas Targets," an invited talk at the Conference on the Application of Accelerators in Research and Industry, Denton, TX, November 2000.
- D. L. Bixler, "Inquiry-Based Physics," American Association of Physics Teachers Texas Section Meeting, Houston, TX, October 2000.
- D. L. Bixler, "Studies of Charge Exchange Interactions between Protons and Gas Targets," Gaseous Electronics Conference, Houston, TX, October 2000.
- D. Bixler, "An Introduction to the ENC Access Center at Angelo State University," TEES Math and Science Conference, San Angelo, TX October 2000.
- David Bixler, "Instructional Technology," SCIMAST Workshop, San Angelo, Texas, July 2000.
- D. Bixler, "Atomic Physics," Texas Pre-Freshman Engineering Program, San Angelo, Texas, June 2000.
- D. Bixler, "Interactions of keV Protons with Gas Targets," DAMOP Annual Meeting, Stoors, CT, June 2000.
- J. C. Lancaster, F. J. Kontour, D. L. Bixler, R. A. Popple, P. Nordlander, F. B. Dunning, and G. K. Walters, "Spin-Dependant Studies of the Dynamics of He+ Ion Neutralization at Surfaces," American Physical Society Centennial Meeting, Atlanta, GA, March 1999.

### **Supervised Student Presentations**

- Juan Olvera and David Bixler, "Archaeometry," ASU Research Showcase, San Angelo, Texas, November 2009.
- Sterling Beeson, David Bixler and Charles Allen, "X-ray Fluorescence," ASU Heterofunctional Materials Symposium, San Angelo, TX, August 2009.
- Karianne Thomas and David Bixler, "Ultraviolet Photography with a Digital Camera," ASU Carr Research Symposium, San Angelo, Texas, April 2009.

- Denis Myasishchev and David Bixler, "Chaotic Electronic and Mechanical Systems," ASU Carr Research Symposium, San Angelo, Texas, April 2009.
- Denis Myasishchev and David Bixler, "Chaotic Electronic Systems," American Physical Society Texas Section Meeting, Stephenville, TX, March 2009.
- Denis Myasishchev and David Bixler, "Chaotic Electronics," ASU Research Showcase, San Angelo, Texas, November 2008.
- Karianne Thomas and David Bixler, "Ultraviolet Photography," ASU Research Showcase, San Angelo, Texas, November 2008.
- Daniel Bullock and David Bixler, "A Classical Model for Virtual Particle Exchange," 2008 Sigma Pi Sigma Congress, Chicago, IL, November 2008.
- Daniel Bullock and David Bixler, "A Classical Model for Virtual Particle Exchange," American Physical Society Texas Section Meeting, El Paso, TX, October 2008.
- Morgan Lynch and David Bixler, "Deriving the Inverse-Square Law from Quantum Field Theory," Carr Research Symposium, San Angelo, Texas, April 2008.
- Morgan Lynch and David Bixler, "Deriving the Inverse-Square Law from Quantum Field Theory," American Physical Society Texas Section Meeting, Corpus Christi, TX, March 2008.
- Jennifer Hendryx, "Effectiveness of Sunscreen at Blocking Ultraviolet Light," American Physical Society Texas Section Meeting, Corpus Christi, TX, March 2008.
- Morgan Lynch and David Bixler, "Rayleigh-Ritz Approximation of the Ground State Energy for a Particle in a Semicircular Well," ASU Research Showcase, San Angelo, Texas, November 2007.
- Margaret Hubbell, "Manipulating the Conformations of Crambin and other Viscotoxins using GROMACS," Carr Research Symposium, San Angelo, Texas, April 2007.
- Morgan Lynch and David Bixler, "Rayleigh-Ritz Approximation of the Ground State Energy for a Particle in a Semicircular Well," American Physical Society Texas Section Meeting, Abilene, TX, March 2007.
- Munir Pirbhai, "Spectral Patterns of Ultraviolet Reflection from Flowers," Carr Research Symposium, San Angelo, Texas, April 2006.
- Munir Pirbhai and David Bixler, "Ultraviolet Reflectance Spectra of Texas Flora," American Physical Society Texas Section Meeting, San Angelo, TX, March 2006.
- Munir Pirbhai and David Bixler, "Ultraviolet Reflection Spectra of Texas Flora," ASU Research Showcase, San Angelo, Texas, November 2005.
- Kremena Gineva, Bonnie Amos and David Bixler, "Floral Spectral Analysis of Four Big Bend National Park Cacti," Beta Beta Beta Spring Meeting, Boulder, Colorado, May 2004.
- Kremena Gineva, "Spectral Patterns of UV Reflection in Different Plant Species of the Concho Valley flora," Beta Beta Spring Meeting, Boulder, Colorado, May 2004.
- Kremena Gineva, Bonnie Amos, and David Bixler, "Spectral Patterns of UV Reflection in Different Species of Flowers," Carr Research Symposium, San Angelo, Texas, April 2004.
- Emiliano Garcia, "Studies of Proton Collisions with Gas Targets," Carr Research Symposium, San Angelo, Texas, April 2004.
- Emiliano Garcia and David Bixler, "Studies of Proton Collisions with Gas Targets," Texas Academy of Science Annual Meeting, Kerrville, Texas, March 2004.

- Kremena Gineva, Bonnie Amos, and David Bixler, "Spectral Patterns of UV Reflection in Different Species of Plants of the Concho Valley," Texas Academy of Science Annual Meeting, Kerrville, Texas, March 2004.
- Kremena Gineva, Bonnie Amos, and David Bixler, "Spectral Patterns of UV Reflection in Different Species of Flowers," ASU Research Showcase, San Angelo, Texas, November 2003.
- Emiliano Garcia and David Bixler, "Studies of Light Emission in Proton Collisions with Gas Targets," ASU Research Showcase, San Angelo, Texas, November 2003.
- Aaron Hoelscher, "Proton Interactions with Gas Targets," Carr Research Symposium, San Angelo, Texas, April 2003.
- Justin Block, "Frequency Stabilization of a Semiconductor Laser," Carr Research Symposium, San Angelo, Texas, April 2003.
- Aaron Hoelscher and David Bixler, "Proton Interactions with Gas Targets," American Physical Society National Meeting, Austin, Texas, March 2003.
- Justin Block and David Bixler, "Frequency Stabilization of a Semiconductor Laser," American Physical Society National Meeting, Austin, Texas, March 2003.
- Aaron Hoelscher and David Bixler, "Proton Interactions with Gas Targets," ASU Research Showcase, San Angelo, Texas, November 2002.
- Justin Block and David Bixler, "Frequency Stabilization of a Semiconductor Laser," ASU Research Showcase, San Angelo, Texas, November 2002.
- Chris Tiftickjian, "Computation of the Electronic Structure of Borane Reagents," Carr Research Symposium, San Angelo, Texas, April 2002.
- L. Phinney and D. L. Bixler, "Studies of Charge Exchange Interactions in Proton Collisions with Gas Targets" American Physical Society Texas Section Meeting, Fort Worth, TX, October 2001.
- Stephen Raif, "Semiconductor Laser Frequency Stabilization Using an Atomic Transition of Rubidium," Carr Research Symposium, San Angelo, Texas, April 2001.
- S. Raif and D. L. Bixler "Semiconductor Laser Frequency Stabilization Using an Atomic Transition of Rubidium," National Conference on Undergraduate Research, Lexington, KY, March 2001.
- Sarah Swaim, "Studies of Electron Transfer Processes in Gas-Phase Collisions," Carr Research Symposium, San Angelo, Texas, April 2000.
- B. Carter, and D. Bixler, "Construction of a Gaussgun," Meeting of the Texas Section of the Society of Physics Students, College Station, TX, March 2000.
- S. Swaim, and D. Bixler, "Studies of Electron Transfer Processes in Gas-Phase Collisions," Meeting of the Texas Section of the Society of Physics Students, College Station, TX, March 2000.
- A. Tijerina, D. Bixler, and A. Wallace, "Wavelet Analysis in an Optical Computer," Centennial Meeting of the American Physical Society, Atlanta, GA, March 1999.