DEPARTMENT OF PHYSICS CALIFORNIA STATE UNIVERSITY, CHICO



Jason Jordan rides the Rocket Trike at the Forty Years of Physics Reunion.

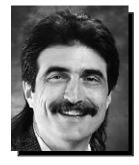
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ADDRESS CORRECTION REQUESTED

Notes from the Chair

Well...that was an exciting school year. We completed the approval process for our new General Physics degree. Samantha Baumgartner was our first graduate of the program and has been accepted into the teacher credential program at CSU, Chico. Our other graduate this year, Samansa Maneshi, has been accepted into the graduate physics program at the University of New Mexico. For the first time ever, all of our graduates are women.



The Forty Years of Physics Reunion was a great success (see the photo essay on page 4). We renewed old acquaintances and began new friendships. We've added three new members to our Advisory Board: Donald Knifong, Paul Bennett, and Gary Grim. Finally, Irene Eggert is retiring as our stockroom technician, and we will miss her outstanding work and gentle wisdom.

Next year holds great promise as we look forward to Lisa Washburn's (Department Secretary) new baby. We will add a new stockroom technician to our team. In addition, our department will be undergoing a Five-Year Program Review. All of our efforts to keep in touch with you and find out what our graduates actually do when they leave us will help us assess the quality and future direction of our program. It's never boring....

Eric Dietz Awarded \$15,000 to Improve Undergraduate Mechanics Laboratories

The CSU, Chico Center for Excellence in Teaching and Learning (CELT) has awarded a Learning Productivity Grant to Eric Dietz for his project, "Creation of Active Learning Environments in the Undergraduate Mechanics Laboratory." Eric will use the money to equip each lab table in room PS 106 with a computer system and sensors for data collection.

Eric described the importance of this method of instruction in his proposal. "Students can be more self-directed in carrying out investigations of physical phenomena in this active learning environment. The immediate feedback facilitates a guided discovery approach with which they can try "new things" or change the parameters of the prescribed exercise with little or no difficulty. In traditional laboratories, the analysis of the experiment is calculation-intensive, where students labor long and hard to obtain some "expected" result. With microcomputer-based laboratory tools, students are engaged with physical phenomena more interactively."

The Arloe Anania-Murray Physics Scholarship

The Arloe Anania-Murray Physics Scholarship Fund honors the memory of our former department secretary, Arloe Anania-Murray. She brightened the department with her outgoing personality; her work and dedication were appreciated by faculty, staff and students. At the time of her death, it was her wish that contributions be made to a scholarship fund for students in the Department of Physics. This wish was characteristic of Arloe's compassionate love and genuine interest in our students.

This year, Joshua Strieby was chosen as the recipient. In addition to being an excellent physics student, he has served as President of the Society of Physics Students and is involved in independent projects with several faculty members.

A deeply felt thank you to the following donors: Dr. Edward & Johanna Millet, Dr. Michael & Nancy McGie, and the Society of Physics Students.

The Michael McGie Service Award

Michael R. McGie received his B.A. in Chemistry in 1957 from Chico State College. By the fall of 1966 he had earned a Ph.D. in physics from UC Davis. He chose to return to Chico State to give back to the community of his origins. While on the faculty for 32 years, Mike always demonstrated a strong commitment to the needs of students. His former students often recall a kind or encouraging word at a critical moment in their college experience. Not only did he give of himself for his students, he served the



department for 10 years as chair and was very active in campuswide governance. Mike's service to others represents the best of the teaching profession, and this award is intended to encourage this commitment in our students. To be eligible, a student must be a physics major with a 3.50 overall GPA. The primary consideration is demonstrated service to others, and financial need is also considered.

We appreciate the generosity of this year's donors: Lisa & Brian Washburn, Elaine Eastham, Dr. Cheuk-Kin & Theresa Chau, Dr. John Young, Dr. David Kagan, Dorothy and Steven Eggert, Kim & Jeff DuFour, the Society of Physics Students, Dr. Robert & Carolyn Paulson, Dr. Edward & Johanna Millet, and Dr. Chris & Amy Gaffney.

Contributions to the Arloe Anania-Murray Physics Scholarship or the Michael R. McGie Service Award can be sent to the Department of Physics, CSU Chico, Chico, CA 95929-0202.

Advisory Board Reviews Advanced Laboratory

The CSU, Chico Department of Physics Advisory Board met on October 24, 1998, to review the upper division laboratory course, Physics 227. Their report included four findings and six recommendations. We are currently working to implement their valuable suggestions. We wish to thank the members of the Advisory Board for their efforts to improve the quality of our program.

Paul Bennett (*B.A. Physics 1986*) is a database programmer. He earned a teaching credential from California State Polytechnic University, Pomona.

Benjamin Catching (*B.S. Physics 1989*) is a senior program manager at Tinsley Laboratories in Richmond, CA. He has a M.S. in physics from the University of Delaware.

Joshua Fishkin (*B.A. Physics 1985*) is a senior engineering specialist at Boeing North American, Inc. in Seal Beach, CA. He was awarded a M.S. in physics and a Ph.D. in physics from the University of Illinois.

Thomas Gosnell (*B.A. Physics 1967*) is a radiation physicist at Lawrence Livermore National Laboratory in Livermore, CA. He earned a M.S. in nuclear engineering from the University of California, Berkeley.

Theresa Hartsell (*B.A. Physics 1984*) is a professor of physics at Clark College in Vancouver, WA. She earned a M.S. and a Ph.D. in astrophysics from the University of Colorado, Boulder.

Gary Grim (*B.A. Physics 1985*) is a post-graduate researcher at UC Davis. He earned a M.S. and Ph.D. in physics from University of California, Davis.

Donald Knifong (*B.A. Physics 1963*) is a data processing manager at the California State Department of Health Services in Sacramento, CA. He earned a M.A. in public administration from Golden Gate University.

James Millerd (*B..S Physics 1987*) is a senior scientist at MetroLaser in Irvine, CA. He received his M.S. & Ph.D. in electrical engineering at the University of Southern California.

Scott Perry (*B.A. Physics 1970*) is a professor of physics at American River College in Sacramento, CA. He was awarded a M.A. in physics from the University of California, Davis.

Boyd Reasor (*B.A. Physics 1969*) is a senior software engineer at Lockheed-Martin Santa Clara, CA. He holds a teaching credential from CSU, Chico.

Danny Sorenson (*B.A. Physics 1983*) is a physicist at Los Alamos National Laboratory in Los Alamos, NM. He received his Ph.D. in physics from the University of California, Davis.

If you are interested in becoming a member of the Advisory Board, please just drop us a line and let us know. We would be delighted to have your input.

Irene Eggert Retires

Irene Eggert has been the stockroom technician for the Department of Physics for the last ten years. When we think of Irene, words like *dependable, diligent, trustworthy,* and *faithful* come to mind. It is hard to recall a time in the last ten years when a lab experiment for a class wasn't set-up completely when the instructor walked in the door of the class. This includes times when Irene was ill and her time sheet revealed that she was absent! This



ability to have labs ready to go when she was not even here is still being investigated by a department committee. Their report is due in March 2010. Irene was always willing to go beyond the call of duty, whether it was helping the Society of Physics Students, setting up a collection of demonstrations for visiting school children, assisting an advanced student with a research project, or helping a student with special needs, she has always gone the extra mile for any student seeking her help. She intends to maintain a very busy schedule of trout fishing, backpacking, grandmothering, and poetry writing. What can we say, except that we will miss her and we wish her well in retirement.

SPS Earns Eleventh Outstanding Chapter Award

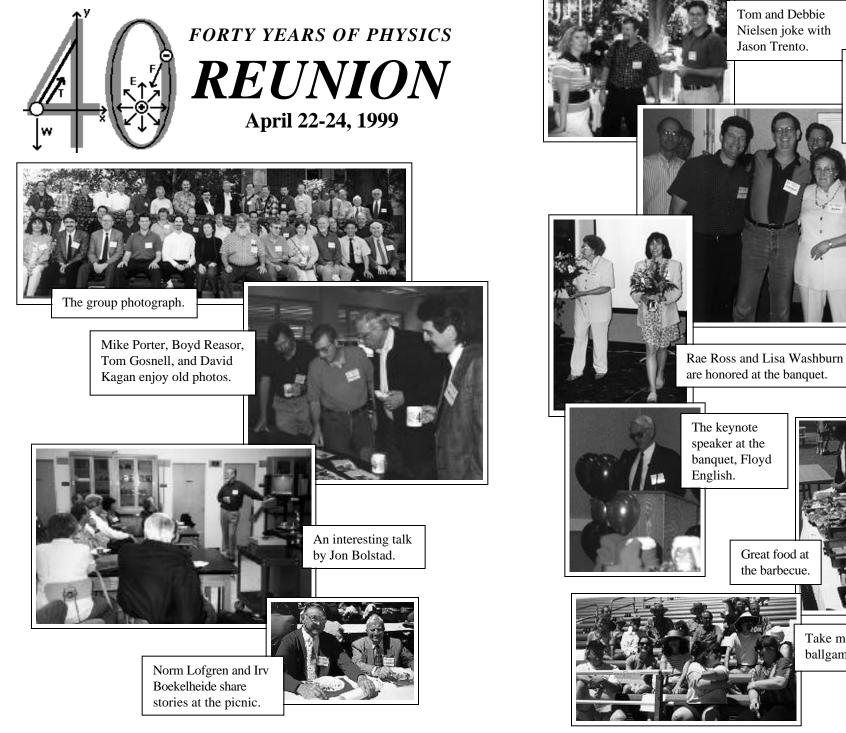
The CSU, Chico physics students received their 11th consecutive Outstanding Chapter Award in recognition of their outstanding chapter activities for the 1997-98 academic year. The SPS is famous for the Annual Pumpkin Drop, reenacting Galileo's legendary Tower of Pisa Experiment, and the Rocket Trike, displaying Newton's Laws of Motion. Society members provide free physics tutoring to CSU, Chico students in the Physics Student Learning Center. Physics students also act as judges and provide prizes for the Chico Science Fair, benefiting local grade school students.

This year for International Physics Day, SPS demonstrated the strength of atmospheric pressure by crushing a partially-evacuated 55–gallon drum. For more information about the CSU, Chico Society of Physics Students chapter visit their Web page (http://physweb.csuchico.edu/sps).

The Department of Physics Annual Fund

The Physics Department Annual Fund supports the educational and scholarly activities of the department. In recent years, it has provided research equipment for the optics and solid state laboratories. In addition, the fund has helped add technology to our classrooms by completing a computer projection system. This system will allow us to bring simulation software and other stateof-the-art educational software into the classroom.

Contributions to the Department of Physics Annual Fund can be sent to the Department of Physics, CSU Chico, Chico, CA 95929-0202.



Paul Bennett, Josh Fishkin, Ernie Baragar, Gary Grim, Rae Ross, Cheuk and Theresa Chau at the reception.



Take me out to the ballgame...Go Chico!