

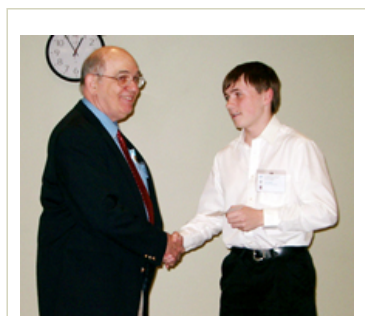
## Department Helps Coordinate 2009 TAAPT Meeting

April 1, 2009

The physics department helped welcome teachers and students from across the state with the Tennessee Section of the American Association of Physics Teachers (TAAPT) annual meeting, held at Oak Ridge High School March 27-28.

Associate Department Head and TAAPT President James E. Parks worked with ORHS Physics Teachers Peggy Bertrand and Matthew Perkins to coordinate the meeting, which began on Friday afternoon with a tour of Oak Ridge National Laboratory. Visitors got a first-hand look at the national laboratory's premier facilities, including the Supercomputing Center, the Spallation Neutron Source, the Center for Nanophase Materials Sciences, and the Graphite Reactor. The group then enjoyed a presentation by Jack Dongarra titled "An Overview of High Performance Computing and Challenges for the Future." Dr. Dongarra is a University of Tennessee Distinguished Professor in the Department of Electrical Engineering and Computer Science and a Distinguished Research Staff member at ORNL in the Computer Science and Mathematics Division.

The Saturday session began with a plenary talk by Marie Westfall of the Oak Ridge Associated Universities Center for Science Education. She spoke on "Research Opportunities for Students and Teachers," a fitting topic for the representatives of Tennessee's college and high school physics departments. Meeting attendees also offered presentations on teaching pedagogy, laboratory experiments and experiences, and research projects.



Dr. Parks congratulates Gavin Nixon of Greenbrier High School on his honorable mention at the TAAPT Poster Session

Students displayed findings from their own research projects in a poster session, with the most outstanding work earning TAAPT honors. The first place award went to Oleg Ovchinnikov of UT for his work on "Deciphering Energy Transformations on the Nanoscale." Mary Katherine Colquitt, Casey McKnight, Amber O'Connell, and Kevin D. Schultz of Austin Peay State University took home the second place award for their project, "Towards an (Almost) Free Spectroscopy Experiment." Gavin Nixon, a student from Greenbrier High School, earned an honorable mention for his project, "The Preparation of Lead Sulfide Doped Cadmium Sulfide Photocatalyst and Its Use in the Decomposition of Water." Dr. Parks presented the awards, including the TAAPT 2009 Outstanding High School Teacher Award. That honor went to Peggy Bertrand in recognition of her long and impressive list of achievements at ORHS, including the 2008 Siemens Foundation's AP Teacher Award. Her influence has also extended well beyond the high school level, with her former students taking the top freshman physics award at UT for the past four years based on their performance in the Introductory Honors Physics Course.

Lisa Agle, a physics major at UT and a member of the ORHS Class of 2008, wrote in support of Dr. Bertrand's nomination that "her ability to teach the concepts of physics was phenomenal.

"I will always be grateful for the concrete foundation in understanding physics that Peggy Bertrand helped me gain," she added.

The meeting concluded with a tour of the newly renovated Oak Ridge High School facilities led by ORHS faculty.

TAAPT meets each year to give the state's physics instructors an opportunity to exchange ideas on the most effective teaching approaches and provide a forum for students to showcase their out-of-classroom work. This year ORHS hosted 40 participants from Austin Peay State University, Greenbrier High School, John Paul II High School, Knox Central High School, Middle Tennessee State University, Murfreesboro High School, Ravenwood High School, Stone Memorial High School, Tennessee Governor's Academy, UT-Knoxville, UT-Martin, and the University of the South.



Peggy Bertrand of ORHS was named the TAAPT 2009 Outstanding High School Teacher