

Honors Day 2015

April 23, 2015

When physics students accepted their accolades at this year's Honors Day celebration, many shook hands with Dr. Björn Jonson, who has some experience handing out scientific honors considering he's the former chairman of the Nobel Committee for Physics. He was in town to give talks at UT and Oak Ridge National Laboratory, but was kind enough to assist as undergraduate and graduate students were recognized for their academic, research, leadership, and service contributions at the April 20 affair. The guest of honor, however, was Dr. Wanda Ferrell (Ph.D., 1985), who won the Distinguished Alumni Award.



Dr. Björn Jonson presents the Outstanding First Year Award to Grant Bruer.

Ferrell delivered the Honors Day talk, outlining her path from UT to the U.S. Department of Energy, where she was program manager for the Atmospheric Radiation Measurement (ARM) Climate Research Facility, as well as the Climate Information and Data Management Group. ARM's mission

is to improve climate and earth models, and Ferrell described her post as "the best job in the federal government." Over the course of her tenure, ARM used data from permanent and later mobile and aerial sites to create ever-more sophisticated climate models. She retired in 2014 after 20 years in leadership. Success, Ferrell told the students, is in the eye of the beholder. For her, it was the opportunity to make a difference.

Dr. Wanda Ferrell



"I had the hand on the helm and was able to steer the big ship," she said.

In 2013 the American Meteorological Society honored Ferrell with the Cleveland Abbe Award for Distinguished Service to Atmospheric Sciences, which also made her a Fellow of the American Meteorological Society. The department named her the 2015 Distinguished Alumnus "for exemplary leadership and distinguished service to atmospheric sciences and climate research."

Student Honors

Before announcing the department's spring honors, Department Head Hanno Weitering also recognized students who have won honors across campus.

The department claimed eight **Chancellor's Honors** (<http://www.phys.utk.edu/news/2015/news-04132015-chancellors.html>) on April 8, followed by an impressive showing at EURêCA: the Exhibition of Undergraduate Research and Creative Achievement, April 13-15. There, physics students won the following awards:

- **David Morse** (College Scholars Honors): Phi Kappa Phi Best of Show, Gold ORE Award in Natural Sciences, 1st Place, Cellular, Molecular, and Microbiology, College of Arts and Sciences (Project: The Interaction of Cytotoxins and Intermetallic Nanoparticles With Lipid Membranes, working with faculty mentor Dibyendu Mukherjee.)
- **Amos Mannes Schmidt**: 1st Place, Physical Sciences, College of Arts & Sciences (Project: Using SPLASH to Visualize Nucleosynthesis of Many Species in CHIMERA Simulation of Type IIA Supernovae Core Collapse, working with faculty mentor William "Rafe" Hix.)
- **Louis Varriano**: 1st Place, Physical Sciences, College of Arts and Sciences (Project: Can mirror matter be detected on Earth?, working with faculty mentor Yuri Kamyshev.)

Honors Day Awards

Thirteen student awards, along with the Teacher of Year Award and the induction of new members into Sigma Pi Sigma, the Physics Honor Society, comprised the heart of the program.



New this year was the **James E. Parks Award** (<http://www.phys.utk.edu/honors.html>), named for the Director of Undergraduate Laboratories and Associate Department Head. Physics alumnus Richard Manley (B.S., 2001; M.S., 2003) and his wife Melissa established this award in early 2015 to honor Dr. Parks' commitment to hands-on, innovative physics teaching in a laboratory setting.

Dr. James E. Parks

Complete List of Honorees

Outstanding First Year Student	Grant Bruer	Grant is a graduate of Christian Academy of Knoxville and last year was one of just nine students in the world to earn every point possible on the AP Calculus BC Exam. He has continued that successful trajectory in our department and was recognized for exceptional achievement in his first year of physics study.
Robert Talley Award for Outstanding Undergraduate Research	Meg Stuart	Meg works with the Relativistic Heavy Ion Physics group and has shown considerable skill using a sophisticated computer code on relativistic hydro-dynamics to guide the group's analysis of experimental data from the Large Hadron Collider in Switzerland.
Robert Talley Award for Outstanding Undergraduate Leadership	Louis Varriano	As the leader of our intrepid Society of Physics Students, Louis has helped coordinate outreach efforts at Pond Gap Elementary School and downtown at Market Square, host the fall and spring picnics, and sponsor workshops on building resumes and finding undergraduate research opportunities. He also represented UT SPS travelling to Washington, D.C., to learn more about the intersection of policy and science.

James W. McConnell Award for Academic Excellence	Matthew Murphy	Matthew, was, interestingly enough, one of the first McConnell Scholarship winners in our department and has continued to excel academically. He has also been an active member of the Society of Physics Students, an assistant in the undergraduate labs, and is set to graduate this spring in physics and math.
Douglas V. Roseberry Award	Allison Sachs	Allison has interned at Oak Ridge National Laboratory and has also contributed to research at CERN and on campus, worked in our undergraduate physics labs, served as a math and physics tutor, and served in a hybrid studio physics lab as an instructor and in-class assistant. She is an active SPS member and is graduating this term with an Honors degree in Academic Physics and a minor in math.
Robert W. Lide Citation	Matthew Murphy	For his dependable, timely, and correct setup of the undergraduate physics labs and his flexibility in meeting this task, this year's Lide Citation for Laboratory Service went to Matthew Murphy.
Outstanding GTA Award	Eric Stacy and Eleftherios Moschandreou	<p>Students in Eric's lab pointed out that he consistently offers clear explanations, makes sure everyone understands the physics concepts behind the experiments, and gives up his time to work after lab and in review sessions to help students understand the material. His enthusiasm and excellent teaching ability made the labs more relatable to students.</p> <p>Eleftherios also received enthusiasm nominations from students, many of them noting that he works hard to make the class interesting and engaging, encouraging all students to ask and answer questions and bringing in posters or worksheets to help explain the theory behind the labs. He also offers practice problems and study guides to help students prepare for exams.</p>
Outstanding Tutor Award	Meg Stuart	Meg was recognized for making outstanding contributions to the Physics Tutorial Center.
Colloquium Award	Ganesh Pokharel	Ganesh was recognized for his exemplary participation in the department's colloquium series.
Stelson Fellowship for Beginning Research	Nirav Patel	Nirav is a third-year graduate student working with Professor Elbio Dagotto. He is co-author on three papers on condensed matter theory and has demonstrated considerable independence in his work.
Stelson Fellowship for Professional Promise	Thomas Papatheodore	Thomas is working in astrophysics with Dr. Bronson Messer. He is lead author on a paper in <i>Astrophysical Journal</i> on reactive shocks, in addition to other peer-reviewed publications, posters, and presentations. He was one of 32 students selected for a summer school on stellar evolution code at UC Santa Barbara, joining students from Harvard, Princeton, Berkeley, and Dartmouth, as well as postdocs from NASA Goddard and Caltech.
Fowler-Marion Award	Matthew Bailey	The Fowler-Marion Award honors a graduate student who excels in scholarship, research, and departmental citizenship. Matthew works with Jaan Mannik in biophysics and has published two papers in the past year, with a third in publication as lead author. His work deals with the mechanics governing cell division proteins. He has also been a mentor to a number of undergraduate and graduate students in Dr. Mannik's laboratory, and last year helped supervise a team of four VolsTeach students in their research methods course.

James E. Parks Award (introduced in 2015)	Eleftherios Moschandreou	The department recognized Eleftherios for his consistent addition of components to the lab experiments to make them more relevant to the lecture material, and for his development of a quantitative approach to studying Faraday's Law.
Society of Physics Students Teacher of the Year Award	Jaewook Joo	SPS recognized Dr. Joo for his outstanding teaching.
Sigma Pi Sigma Inductees	Kristen Beard, Spencer Beloin, Amos Manneschmidt, Allison Sachs, Meg Stuart	