

## Physics Brings Home Six Chancellor's Honors for 2012

April 11, 2012

The Physics Department was well-represented at the 2012 Chancellor's Honors Banquet, as an assistant professor and five of our students heard their names called among the honorees at the April 9 ceremony.



Assistant Professor **Kate Jones** was recognized for Professional Promise in Research and Creative Achievement. A nuclear experimentalist, her award biography explains that she "researches the intersection of nuclear structure, nuclear reactions, and nuclear astrophysics. In the past five years, she has published more than 30 peer-reviewed articles and several articles in conference proceedings. Her latest research accomplishment was published in the prestigious journal *Nature* and highlighted on the cover of *Physics Today*."

Physics students, both undergraduate and graduate, were also among the recipients of these prestigious awards, given each spring to the students and faculty members who best represent the ideals of the campus: excellence in teaching, research, academic accomplishments, outreach, and building a vibrant and diverse campus community.

Honored for Extraordinary Professional Promise were undergraduates **Eric Martin** and **Tucker Netherton**, as well as graduate students **Andrew Nicholson** and **Miaoyin Wang**.

Martin is a graduating senior in the Chancellor's Honors Program, majoring in engineering physics. He works with [Dr. Norman Mannella's research group](#), where he started out a year and a half ago writing software and quickly moved into undertaking research, including the analysis of various spectroscopy data on the thermoelectric oxide  $\text{CuRh}_{1-x}\text{Mg}_x\text{O}_2$ . More recently, he has worked on data acquisition and analysis of photoelectron spectroscopy data in non-compensated N/Cr co-doped titanium dioxide. Martin's honors include the student poster award at the 2011 Annual Meeting of the Tennessee Section of the American Association of Physics Teachers (TAAPT) and a 2011 award in the College of Arts and Sciences Physical Sciences Division at EURCA, the university's Exhibition of Undergraduate Research and Creative Achievement.

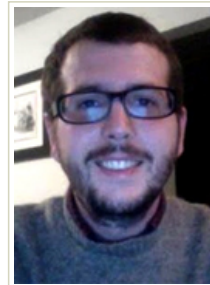


Netherton is also a senior in the Chancellor's Honors Program who will graduate in May. He began working with [Dr. Pengcheng Dai's group](#) more than a year ago growing single crystals of iron-based superconductors, and was a co-author on the group's *Nature Communications* paper "Spin waves and magnetic exchange interactions in insulating  $\text{Rb}_{0.89}\text{Fe}_{1.58}\text{Se}_2$ ," [published in December 2011](#). He has also worked as a tutor for the department, done job shadowing in UT Medical Center's Radiation Oncology and Medical Physics department, and has volunteered for several campus and community projects.

Nicholson is a Ph.D. student who has been working with [Dr. Adriana Moreo](#) on condensed matter theory research for the past four



years. His first project was to reproduce all the analytical and numerical calculations that led the research group to study a two orbital model for the pnictides. He has since studied the conditions under which interband pairing in multiorbital systems could be realized, and has played a leading role in the numerical study of an extended version of the two orbital model. He is a co-author on seven publications, with an eighth in press, and is lead author on three of them.



Wang is a graduate student who has been working with the [Dai Group](#) for more than three years. He is studying spin excitations in Ni-doped  $\text{BaFe}_2\text{As}_2$  and has travelled to the National Institute of Standards and Technology (NIST) to carry out independent research work. Late last year, he made a major discovery by solving complicated spin waves in  $\text{RbFe}_{1.6}\text{Se}_2$ , important work that was published in *Nature Communications*, where [he was the lead author](#). He has already published eight papers in peer-reviewed journals.



Senior **Geoffrey Laughon** was recognized with a Chancellor's Honor for Extraordinary Academic Achievement. In addition to his stellar academic accomplishments, he previously worked with [Dr. Yuri Kamyshkov's group](#) on the measurement of reemission of liquid scintillator under ultraviolet light excitation. He worked on the construction of an improved detection cell and also on modernizing a UV monochromator to include computer control of experiments.



A complete list of the 2012 UT Chancellor's Honors Recipients is available online at: <http://chancellor.utk.edu/honorsbanquet/2012/index.shtml>

## 2012 Physics & Astronomy Chancellor's Honors Recipients

### Faculty:

- **Kate Jones**, Professional Promise in Research and Creative Achievement

### Students:

- **Geoffrey Laughon**, Extraordinary Academic Achievement
- **Eric Martin**, Extraordinary Professional Promise
- **Tucker Netherton**, Extraordinary Professional Promise
- **Andrew Nicholson**, Extraordinary Professional Promise
- **Miaoyin Wang**, Extraordinary Professional Promise