

## Physics Professor Witek Nazarewicz Named UT-Battelle Corporate Fellow

July 31, 2013

Witek Nazarewicz, UT's James McConnell Distinguished Professor in Physics, has been named a UT-Battelle Corporate Fellow, earning one of the highest honors bestowed by Oak Ridge National Laboratory and his second major ORNL honor in less than a year. While Nazarewicz is Distinguished R&D Staff in the ORNL Physics Division, his primary appointment is with the physics department at the university, where in addition to his stellar research record in nuclear physics, he teaches courses and mentors students and post-docs, and also serves on internal committees to help shape the direction of the department's teaching and research efforts. Coupled with those responsibilities have been his tireless efforts on behalf of the nuclear physics community in building international collaborations to answer fundamental scientific questions, and encouraging young scientists from all over the world to do the same. In October Nazarewicz was named the national laboratory's **Distinguished Scientist for 2012**; the corporate fellowship distinction is yet another indicator of how highly-regarded his efforts are well beyond the UT campus.



Corporate Fellow status is reserved for individuals who have made significant and sustained contributions to their respective fields over the years, and Nazarewicz is certainly a fitting candidate. He is a world-recognized authority on nuclear structure, with his work referenced more than 16,000 times, ranking him among the most highly-cited physicists as listed by ISI. He has published more than 350 papers in refereed journals, and served as

scientific director of the ORNL Holifield Radioactive Ion Beam Facility from 1999 to 2012. He is the physics co-director of NUCLEI, the NUClear Computational Low-Energy Initiative, a Department of Energy initiative that takes advantage of high-performance computing to advance research in nuclear physics, computer science, and applied mathematics. The program is the direct descendant of UNEDF (the Universal Nuclear Energy Density Functional), a highly-successful collaboration he directed with the goal of building a comprehensive framework of atomic nuclei.

Nazarewicz is keenly interested in bringing together like-minded researchers, at all stages of their careers, to share tools and discoveries. He spearheaded the development of theory institutes in nuclear physics, one in **Japan** one in **France**, and one in **China** to encourage the exchange of scientific ideas across continents. He has helped organize dozens of workshops and conferences and has given nearly 250 invited talks and more than 250 more invited seminars and colloquia. Involving students has always been a key aspect of his research. In a 2012 *Nature* ([http://www.phys.utk.edu/news/2012/news\\_nuclear-landscape\\_06272012.html](http://www.phys.utk.edu/news/2012/news_nuclear-landscape_06272012.html)) paper explaining a vast extension of the nuclear landscape, UT physics students (including two undergraduates) were among his co-authors, and he is also a faculty member with UT's **Bredesen for Interdisciplinary Research and Graduate Education**

And while his research uses sophisticated theory and computing techniques to understand the intricate properties of atomic nuclei, he spent last spring teaching a 300-level course on thermal physics for the physics department.

Nazarewicz's work has culminated in many honors. In 2012 the American Physical Society awarded him the **Tom W. Bonner Prize**, which recognizes and encourages outstanding experimental research in nuclear physics. In 2008, he was named a Carnegie Centenary Professor by the Carnegie Trust in Scotland, and received an honorary doctorate from the University of the West of Scotland in 2009. He is a fellow of the American Physical Society, the UK Institute of Physics, and the American Association for the Advancement of Science.

Nazarewicz earned the Ph.D. in physics in 1981 at the Institute for Nuclear Research in Warsaw. He joined the UT physics faculty in 1995 and has been part of the ORNL Physics Division since 1996. He is also a professor of physics at Warsaw University and contributes his time to more than 14 professional committees and editorial boards.