

Spotlight on Hidden Physicists

Kate M. McAlpine, Freelance Writer, Lowell, MI

I'm a freelance writer and sometimes rapper, specializing in physics. As a science communicator, my job is to explain research. Sometimes it's documenting the progress of a long-term project, like my current work with the ATLAS e-News, for the ATLAS experiment on CERN's Large Hadron Collider. Sometimes it's reporting about a recent advance, as in the articles for New Scientist magazine. Sometimes it's just goofing off and trying to get the word out to whoever cares to listen, as with the Large Hadron Rap (view at www.spsnational.org/wormhole/) and it's lesser-known predecessor, N3UROCH!P. In the interviews about the Large Hadron Rap, I often found myself in a position to defend scientific research and explain its value. Other times, I needed to explain how scientists know that the most powerful particle accelerator ever constructed is not going to bring about the end of the world. I planned the science communicator part while still in college, studying both physics and writing at Michigan State University, but I didn't plan rap as an aspect of my career. But so it is now, with one on nuclear physics to be finished in June and a black hole rap toward the end of the summer or early fall. For my most regular work, on the ATLAS e-News, our task is sometimes called "in-reach," sharing the progress of the detector and activities in collaboration with over 2,200 member physicists scattered across the globe.



spective on physical reality when confronting problems -- I have faith that witchcraft is required neither for comprehending the situation nor its solution -- and I can pursue the root cause of problems down to the atomic level if necessary. It also makes me pretty fearless when confronting a situation I've not been trained for; I can just head for the library and start reading books, confident that usually only a specialized vocabulary needs be learned.

Robert Cook, Hattiesburg, MS

I received a BS in physics from Lycoming College in Williamsport, PA, along with a BA in Astronomy. Currently I'm a member of the first class of The University of Southern Mississippi Sports and High Performance Materials PhD program. The program is a first of its kind in the United States: it combines the School of Polymer Science with the School of Health at USM to form a completely new field dedicated to the understanding and advancement of sports, military, and first response equipment. My interest is winter sports equipment, and I have done internships with K2 Sports, designing tests to analyze the physical properties of high-end snowboards, as well as an internship at The University of Mississippi studying biomechanics relative to the lower body during snowboarding. If you would like to know more about our program, visit www.usm.edu/shpm.



Norman C. Helmold, Laurel, MD

I was originally inducted as a charter member in 1968 at Pennsylvania Military College (now Widener University), where I earned my BS in physics. I then transferred my membership to the American University chapter in 1977, where I earned my MS in physics. Shortly after leaving the Army and beginning my first round of graduate school in really high energy physics (cosmic rays), I innocently inquired if the loose green wire behind the equipment rack shouldn't be connected to something -- possibly a ground. Indeed, it should have been, and connecting it immediately caused the rack to function properly. That was the end of a normal physics career for me. For 35 years or so, I've pretty much been getting other people's experiments to function -- currently space payloads and the occasional launch vehicle in my third time at NASA.



My physics training gives me an excellent per-

Joseph Chudy, MD, Salinas, CA

I am proud of the years that I studied physics and how it has helped me to pursue the career path I find myself in. While at California State University, Northridge (CSUN), I helped revive their SPS chapter, I believe around 1973. Those were indeed exciting years. One of the regular outings we did was to attend Dr. Richard Feynman's monthly lectures to the scientists at the Hughes Research Laboratories in nearby Malibu. I led a group of students to those lectures for a couple of years. Toward the end of the first year, I asked Dr. Feynman if he would come speak to the students at CSUN. He initially declined the offer stating he resented all the notoriety he received associated with his Nobel Prize. He later reconsidered when he saw we continued to come to his Hughes lectures. His presentation at CSUN was a resounding success, presented to a standing room only gathering in the school's largest lecture hall. As I drove him back home to Pasadena (he was a non-driver), he remarked that it was the most fun he had had since receiving his Nobel. We were happy to have given back something to one who had given so much to us. I was saddened to read of his passing a few years ago. He left a memorable mark on so many of us.