

## **Dedication to One's Craft & Pride in One's Work: What One Learns when Physics Students and Nobel Laureates Meet**

*by Darryl Lewis, SPS Reporter, North Carolina Agricultural & Technical State University*

My fellow students and I received information about the Spring 2010 Joint Meeting of SPS and AAPT from Dr. Abdellah Ahmidouche (our Physics Dept. Chairperson) through email. Dr. Ahmidouche regularly sends to interested Physics majors, and some non-Physics science students, emails about upcoming events and seminars to be held in the local Greensboro area.

I am just becoming a member of the Society of Physics Students (SPS), and I knew that this meeting would be beneficial for me to attend. I had not received the program outline and therefore was not informed beforehand that Nobel Laureate Dr. Wolfgang Ketterle would be our inspiring keynote speaker. I believe that the best way to display your passion towards any type of matter or subject is to become as involved as you can and network as much as possible. My goal in attending was not only to enjoy a well put together two days of events, but to also further my knowledge the current physics issues at hand.



Students during lunch. *Photograph Courtesy Martin Kamela*

I travelled with two of my peers, Ronald Gamble and Verida Leandre, who both attend NC A&T State University. They are both currently in their fourth year of undergrad studies and will

soon be graduates. Mr. Gamble and I both have the same aspirations, to become Astrophysicists. Ms. Leandre is seeking to become a great figure in our Physics community as well.

The Zone 5 Meeting of the SPS took place on April 16 and 17, on the campus of Elon University. The Zone Meeting was held jointly with the North Carolina Section of the American Association of Physics Teachers (AAPT). It began with a reception Friday evening and a banquet. Later in the evening the keynote lecture was delivered by Dr. Wolfgang Ketterle, on superfluid gasses near absolute zero, followed by an ice-cream social. On Saturday the activities started with a Q&A with Dr. Ketterle. There were two panels: one on graduate school experience with students from four nearby physics graduate programs, and another on career opportunities



Dr. Wolfgang Ketterle (right) and Dr. Cathy O'Riordan (of AIP) during lunch.

*Photograph Courtesy Martin Kamela*

outside of the university. There were two poster sessions, one dedicated to physics research and another to outreach. Finally there was a lecture on nuclear energy by Dr. Leo Piilonen of Virginia Tech. The Zone Meeting allowed students from various SPS chapters to meet and exchange ideas.

Meeting the Nobel Laureate,

Wolfgang Ketterle, was an experience

all its own. Dr. Ketterle is an outstanding human being; he is very profound in his own mindset. Unlike other Physicists in his field of work that I had met before hand, I noticed that he was very in tune about “feeling” the world around him and integrating that into his Physics. Throughout the dinner that night all of us who were sitting at the table were absorbed in a conversation about

the way marathon runners, and just runners in general, run without bobbing up & down, if their motions were to be tracked as if each were a uniform mass. The conversation after a just few minutes developed into an in depth discussion about the motion and technique of the runners. If you were to substitute the runner for a uniform mass and track the motion of that mass, then the mass should demonstrate uniform straight-line motion. What made it amusing was that half of

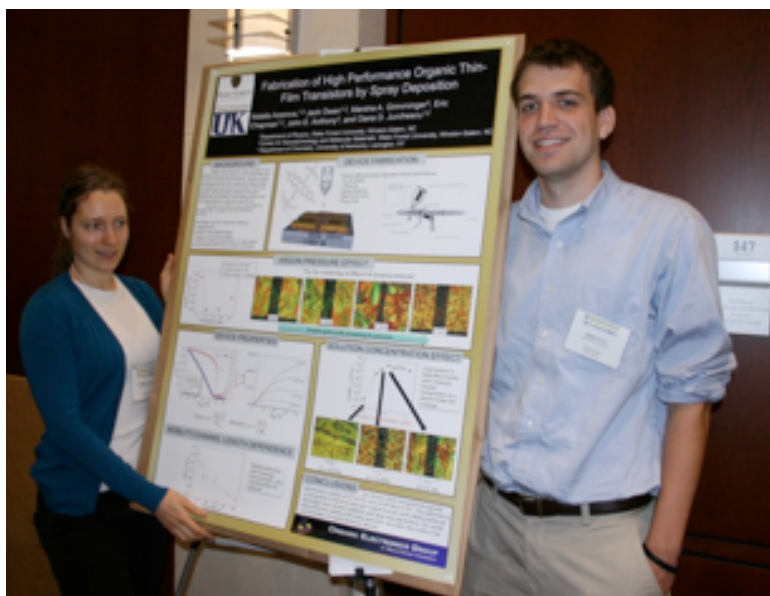


Poster Session. *Photograph Courtesy Martin Kamela*

the table agreed and the other half disagreed, stating that the mass should have an oscillating motion, given that the average runner (i.e. ourselves) actually bob as we run. This was a very interesting conversation among fellow physicists and an overall

good experience with our friend, Nobel Laureate Dr. Ketterle.

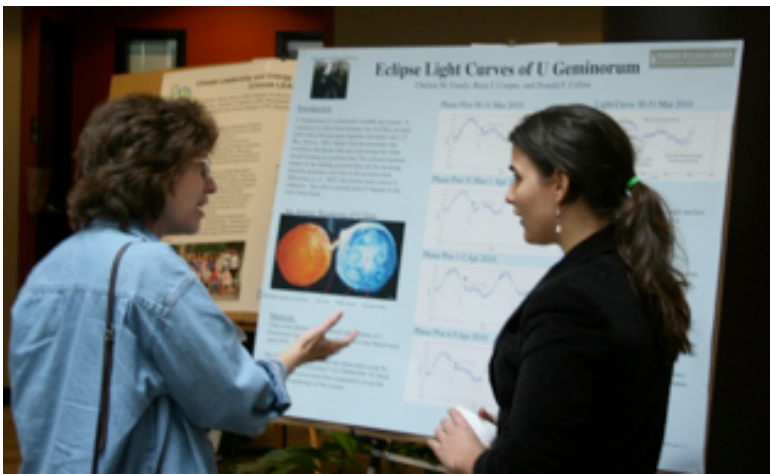
I had prepared myself to be met with the issue of diversity at this meeting, but as I arrived I found that a diverse Physics community seemed to be no issue at all. There were students and professors from all types of backgrounds in attendance. I



Poster Session. *Photograph Courtesy Martin Kamela*

enjoyed the smiles that everyone gave as we introduced ourselves and explained our goals in life, and in return I was able to learn how others managed to achieve their goals. Now, after the meeting, I feel as if I have become more self-driven. I feel much more motivated and encouraged to follow my career choice and create paths for other aspiring Physicists, of any and every concentration.

Of course I took back to my campus tangible items such as the SPS Meeting Program, an SPS pen and balloon, and coolest of all a Geometric Algebra for Physicists book signed by Dr.



Poster Session. *Photograph Courtesy Martin Kamela*

Wolfgang Ketterle himself. But more importantly, I took back the knowledge of how to dedicate yourself to your craft and take pride in your work. Every professor I spoke with showed so much passion towards not only Physics, but also to education. One of the main ideas

that I brought back with me is that taking your education seriously is important and will yield great results in the future.

I am now eagerly looking forward to the next Zone 5 Meeting, which will take place at Davidson College in the fall of 2010.

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Photograph of the Author.  
*Courtesy of Darryl Lewis*