

2008 Sigma Pi Sigma Quadrennial Congress Report
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Thursday Night Dessert Reception

Like the majority of schools that attended the 2008 Sigma Pi Sigma Quadrennial Congress, the Angelo State University Chapter arrived at the Holiday Inn Select in Naperville, IL early Thursday afternoon, and was able to enjoy some free time to relax and get acquainted with the area prior to the evening activities. But by 5:00 pm, the hotel lobby and ball room were teeming with physicists of all ages. Our group of 13 made its way to the registration tables and exhibit hall around 6:00 pm and was happy to see the welcoming faces of the AIP staff hard at work there passing out Congress information, care packages, and selling t-shirts. We were possibly even more excited, however, to see the large assortment of desserts, coffee, and other goodies provided at the reception, sponsored by the American Astronomical Society (AAS). These cleverly prepared treats were soon reduced to platters of crumbs; just more unnecessary evidence that college students, and professors alike, know exactly what to do when free food is within grabbing distance.

While the dessert consumption was in full swing, the Congress exhibitors had numerous tables set up for students to peruse while getting to know one another. There were many schools handing out information pertaining to graduate school and summer research opportunities as well. Member organizations of AIP also held exhibits, offering a few rather interesting activities for attendees. Probably most popular was the American Physical Society's LED and magnetic battery combinations. It would be interesting to know just exactly how many LED lights APS handed out that night, because it seemed like anyone who was anyone was sporting their favorite color on their nametag! The electrostatic ribbon at the Northwestern University booth also made a big impression on bypassing students. (Pictures 1 and 2 below)

Following the reception, the "herd" of Congress attendees made its way into the lecture hall and was officially welcomed to the Congress by James Stith and Ann Viano. Following their short introduction, Congress Planning Committee members Mike Gaither and Justin Stimatz made their way to the stage and spoke briefly about their efforts in developing the theme of Scientific Citizenship. They stressed the importance of the connection between physics and society and suggested that the Society of Physics Students and Sigma Pi Sigma get involved in improving this connection.

Jill Tarter, Director of the Center for SETI Research at the SETI Institute, offered an outstanding finale to our first evening at the 2008 Sigma Pi Sigma Congress. Dr. Tarter shared with Congress attendees some stimulating ideas about the *Search for Extraterrestrial Intelligence*. She motivated the listeners with questions like: "Are we alone?" and "Where did we come from?" An interesting point that was made during Dr. Tarter's lecture that perhaps serves as an answer to these preliminary questions was the fact that there are more stars in the universe than there are grains of sand on earth, many with the potential to support life much like our sun. Her lecture went into an explanation of the sophisticated science that goes on at the SETI Institute. Additionally, her observation that "science is sexy" gained

much appreciation from the predominantly scientist audience. Dr. Tarter's opening plenary was, without question, an eye-opening, entertaining, and very enjoyable presentation for all in attendance. Furthermore, the lecture provoked deep thought in our students, which made for interesting conversation and debate in the hotel rooms once we left the ballroom.

Speaking with Dr. Tarter after the lecture, we asked if she could offer any advice to undergraduate students. She stressed the importance of finding something you love, and then making a career out of it. She also noted that time and discipline will always be required when working towards a specific goal. Lastly, Dr. Tarter counseled us to always be humble about what we know. This last bit is important to the theme of scientific citizenship. It's important to be humble and approachable as a scientist. By doing so, offering explanation and education to those whose backgrounds differ from your own is made easier for both parties. If we keep this in mind as we traverse our careers in science, we may well be able to follow Jill Tarter's example and pique others' interests in science.

Congress Feedback from Our Chapter Participants

The 2008 Sigma Pi Sigma Quadrennial Congress was very well organized and extremely time efficient. All the effort put into forming the intricate schedule for the three-day-long meeting was exceptional and the staff members of AIP definitely deserve a pat on the back for taking over the responsibility of making the Congress so successful. The staff and docents at Fermilab were also very cooperative and extremely generous for allowing the Congress to be held there and letting our group of 500+ take the opportunity to explore the outstanding advanced laboratory facilities. The guided tours were all organized and executed very well. (Picture 5) The tour guides were very informative and more than willing to answer all of our questions, making for an interesting trip around the campus. Also, the scientists who took time from their daily schedule to entertain and educate so many eager students and faculty should be commended for their own contribution to scientific citizenship. The only complaint we heard from anyone was that the buffalo did not appear to be very playful on the cold and rainy afternoon, but I don't think anyone can blame them for acting so.

The Scientific Citizenship Workshops proved a great way to introduce the members of our chapter to current issues related to scientific citizenship and allowed them a chance to contribute to the discussions held thereafter. This was one aspect of the Congress that received a great amount of positive feedback from our members: the amount of involvement offered to the students. Everyone felt they were able to converse with scientists of all ages and have their opinions heard and seriously taken into consideration. Needless to say, these workshops sparked a lot of good conversations and the group leaders did a great job of continuously relating the discussion to the overall theme of the role of scientists in today's society. It truly gave us all a chance to reflect on our own academic careers and consider how we, as students, can try to be better scientific citizens in our day-to-day life.

The speakers for these workshops, and the plenary lecturers as well, were all very well-selected by those planning the Congress and yielded a great deal of positive feedback from students in our chapter. One speaker in particular was Dr. Aziza Baccouche with her presentation called "Mediating

Public Perception, A View from Behind the Camera.” Her workshop lecture was extremely moving and included some very powerful videos. Her message of “you don’t have to have sight to have vision” resonated strongly with our students, serving as an inspiration for all of us to bravely face and overcome obstacles in our own lives. One exceptionally memorable moment from Aziza’s presentation that one of our students mentioned was when she stated how she is “among a very small percentage of African American women who have their PhD and also happen to be blind.” This brought up another great theme for the Congress as well: diversity in the physics society.

With diversity in mind, another notable comment from one of our students was how her favorite part about the Congress was the large representation of women physicists. “It was inspiring to hear all of their accomplishments, especially knowing that getting to a respected position in a physics-related field was not necessarily an easy task.” Seeing these women in such prestigious positions in the physics community was one of the notable parts of the 2008 Congress. For many of the young aspiring female physicists in the audience, this was the largest number of true peers they had ever experienced. The Congress makeup was certainly something that the physics community as a whole could take a lesson from. For many Congress attendees, the number of women and other traditionally underrepresented groups present served as a true inspiration, and provided countless networking and career building opportunities for students from diverse backgrounds from all over the country. This theme of diversity was the subject of the Friday night dinner presentation by Fred Jerome and Rodger Taylor when they discussed their book, *Einstein on Race and Racism*. Their presentation on the passion of Einstein for racial diversity and ending racism was inspiring, educational, and eye-opening for many attendees.

Other Tales from the Road Trip

The Angelo State University SPS Chapter started its long and winding journey from San Angelo, TX in the early morning hours on Thursday November 6, 2008. Our group of ten made up the majority of passengers on the small 7:00 AM flight leaving from one of the only two gates in the tiny west Texas airport. We are pleased to report that *most* of our students made it through the security checkpoints quickly and quietly, but did experience a minor incident involving a biology dissection kit and an unfinished AC/DC converter intended to be a homework project for an Electronic Instruments course. The culprit, who wishes to remain nameless, was very cooperative with the small-town TSA, and assured the agents – as well as her fellow classmates - that it was all just an accident and she had no plans of terrorism while on the short flight to the Dallas-Fort Worth airport. With this small episode aside, the remainder of our trip to Chicago and the Naperville continued rather smoothly and we eventually reunited with the rest of our group there: our SPS advisor, Dr. Toni Sauncy and two other ASU representatives – Jennifer Hendryx, Assistant Zone 13 Councilor and ASU alumnus Meagan Saldua.

Outside of Fermilab and the beautiful campus at Batavia, IL, our students also got the chance to enjoy some of the other great sites and sounds in the Chicago area. Our advisor strategically scheduled our flight back to Texas for late Monday afternoon, leaving us the entire day Sunday and the majority of

Monday morning to play around in the windy city. We started our day early Sunday morning with a scenic train ride into downtown Chicago. Once there, half of our group took a walk towards Lakeshore Drive and spent the day at the scenic Adler Planetarium, while the other half made their way to the Museum of Science and Industry. We joined back up later that evening in Millennium Park to get a look at the famous Cloud Gate sculpture, better known as "The Bean." (Picture 6) After capturing what seemed like a thousand photographs of our group in the reflection of the large stainless steel blob, we proceeded to the well-known Exchequer Restaurant to enjoy some Chicago-style deep dish pizza in a historical site once thought to be a hangout of Al Capone's.

Conclusion

The 2008 Sigma Pi Sigma Congress experience has been the subject of countless discussions and has stimulated and inspired a new enthusiasm for physics in our group. Even though only a small percentage of our physics students were able to attend, the energy that the attendees brought back to the department will be long-lived. In terms of thinking about how the experience could have been improved, we have failed to come up with any ideas that would have made anything better. The logistical details that were undertaken by the SPS National office and the Congress planning committee were impressively carried out in a way that seemed effortless to the attendees, although we are sure that this was not the case. The efforts of the SPS staff were truly impressive. Our SPS Advisor, Dr. Toni Sauncy, who was a first time Congress attendee, made the remark that the Congress experience was "unlike any other physics conference I have ever been involved with. It made me glad to have chosen the career I did. It made me proud to be affiliated with young aspiring physics students."

Plans to have an even larger group from Angelo State University attend the next Congress are already being discussed. We wouldn't dare miss it.

Various Congress Photos



Picture 1: Students “scientifically investigating” the electrostatic ribbon toy at the Northwestern University booth on Thursday evening.



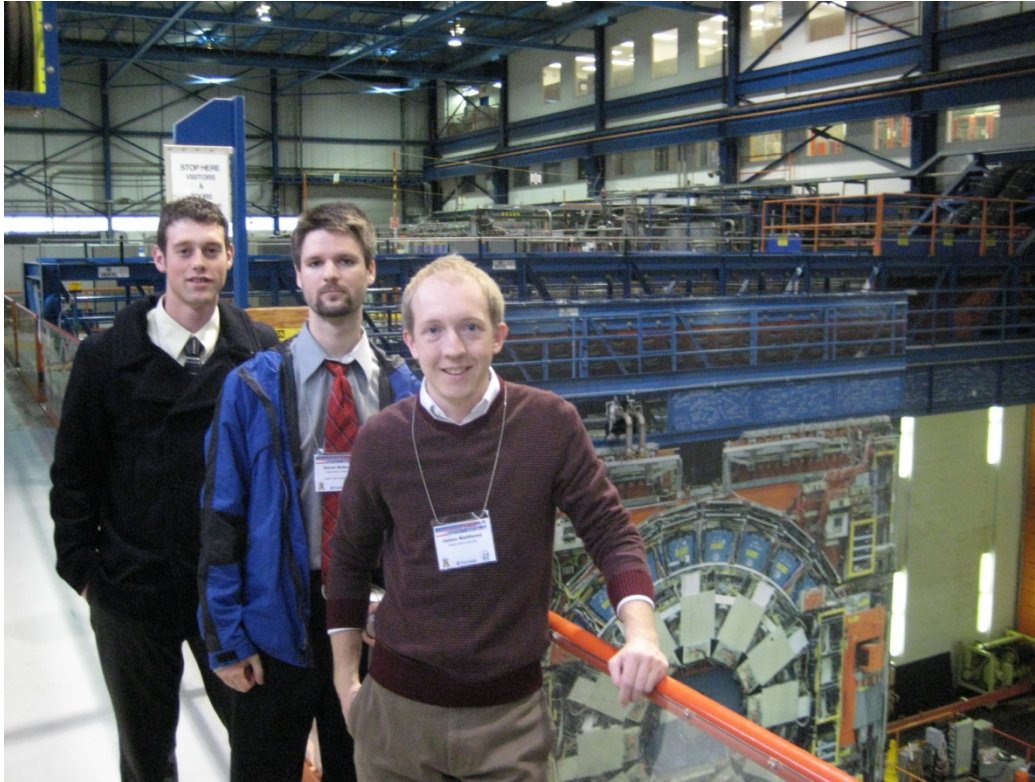
Picture 2: ASU student Henry Schreiner showing off his LED nametag decoration during Thursday evening’s reception.



Picture 3: Angelo State student Kunal Bhatnagar posing for a quick photo with Fermilab Deputy Director Young Kee Kim.



Picture 4: The Angelo State University group standing outside of Wilson Hall following events Saturday evening.



Picture 5: ASU students (from left) Steven Jackson, Daniel Bullock, and James Matthews posing during a tour of the Collider Detector (CDF) facilities.



Picture 6: Standing in front of the famous Cloud Gate sculpture at Millennium Park in Downtown Chicago. Our photographer (Advisor Toni Sauncy) can be seen in the distorted reflection above us.