Connections in Space
by Toni Sauncy

For those who have followed Radiations for a while, you might be looking in this spot for a corner. Well, the “Director’s Corner” is now empty space, other than the 1025 or so nitrogen, oxygen, and small assortment of other gas molecules per cubic meter that now move about without randomly colliding with former director Gary White. There is a new director in the nearby space, but as I assumed that position, I chose to leave the Director’s Corner empty, except for the dancing air molecules. Honestly, I’d rather not be in the Director’s Corner, or any other corner for that matter, because I spent a fair amount of time there in my family home during my formative years.

Outside of the corner, I am displacing air molecules as needed in order to fill the Society of Physics Students (SPS) director’s space. My recent occupation of this space implies that another space had to be emptied. So, about ten weeks ago, the approximately 30 m³ room that I formerly occupied was vacated. Other than the suspended dust particles and a similar collection of air molecules that I no longer displace, my former space, an office in the Vincent Nursing and Physical Science Building at Angelo State University in West Texas, is now empty. Like my faculty position, my former space might be thought of as “on sabbatical”, with the air molecules and dust particles in that space free to move about without randomly colliding with me. Physically speaking, the transition from that space to this new space was just a change in the location at which I displace some collection of air molecules with my presence. But there are several other physical features that are uniquely different here in this new space—the rapidly varying gradient of the surfaces surrounding my new space when compared with the vast expanse of small gradient surfaces that one finds in the landscape of West Texas; the view of the horizon, which in my current space is obstructed by tall, leafy plants called trees; and the fact that this new space is just above sea level (approximately 20 m), while the flatland I left behind is elevated about 550 m above sea level. The space in which I live has certainly changed, but the reason I am here comes from a constant, connecting influence over the course of my career, that of the SPS.

In making this transition in space, I began to think about all the different spaces and stations that I have occupied since my introduction to SPS as a student member. In making this transition in space, I began to think about all the different spaces and stations that I have occupied since my introduction to SPS as a student member. My first phone call to the SPS national office was as an inexperienced graduate student looking for a ray of hope in what at the time seemed to be a dark sea of dismal news for physics PhD graduates. Since that time I have found the people, the programs, the support network, and the opportunities made possible by the existence of this unique group, whose sole purpose is to serve students, to be inspiring. My initial connection came through two influential mentors: esteemed former director Dwight (Ed) Neuenschwander, and tireless former zone 13 councilor Mary Beth Monroe. With Monroe’s encouragement, I requested that Dr. Neuenschwander, SPS director at the time, visit my school and give a talk in a session that focused on physics careers as part of the biannual Joint Texas Physics Meeting. I was just an ordinary frustrated graduate student, but the SPS director accepted without hesitation. It was the positive experi-

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dence of working with the SPS national office to organize that special session that set me on the course through space and time that brought me to this new space. Following that affirming influence, I knew that someday I would be a zone councilor like Mary Beth. SPS and Sigma Pi Sigma were my initial gateways into the influence of professional organizations and the impetus for much of the professional service in which I have been involved over the course of my career. But I had no inkling that someday I would occupy the SPS director’s space. It is because of the historically strong and lengthy list of Sigma Pi Sigma members, now over 80,000 names, that these kinds of connections continue to influence the lives of young students. As a faculty member, to be connected with an organization whose mission focuses on serving the needs of students, their futures and the future of the professional community of physics was a natural fit. The change for me now is one only of perspective. I am now privileged to be a member of the team that I and my students depended on for so many years. And while in this space I am not technically a chapter advisor, this space allows me the great honor of working with inspiring chapter advisors all over the country and of being a first-hand witness to the connections SPS is making across the world, with new chapters in China, India, and a recent request from an eager group of students in Kazakhstan. So, while I am no longer occupying the space or the station of an on-the-ground, in-the-trenches chap-

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d and also from Brazil, France, Mexico, the Netherlands, Iran, China, Ukraine, Switzerland, and Croatia. Coupled with the friendships one develops in the virtual United Nations that is graduate school, I belong to a network that spans the globe. I have found great professional and personal pleasure in working on problems and sharing ideas with people from around the world. While I’m happy that I’ve been able to contribute to the understanding of ultracold collisions and high-resolution atomic spectroscopy, what I’m most proud of is the opportunity that I have to share my knowledge with others. As a professor at an undergraduate-focused institution, there are lots of things that I look forward to as we proceed through the year—Reassuring nervous students and their parents at orientation that they have made a fine decision to pick physics as a major. Standing in front of a class talking about a complex topic and seeing eyes of students light up when every-

people from all kinds of backgrounds to do the same. As we approach the coming Sigma Pi Sigma Quadrennial Congress with the theme of “Connecting Worlds,” we might pause to note the connections through space and through time that a passion for physics has produced in each of our lives. The connections are many, no matter what space you occupy.

*Gary White is now serving as a rotator at the National Science Foundation in the Division of Undergraduate Education. I am on a sabbatical from Angelo State University, Department of Physics.*

“The biennial joint meeting of the Texas sections of the APT, AAPT, and zone 13 of SPS began in 1982.

*The highlight of my department’s year is Awards Night. Students, faculty, staff, alumni, and emeriti convene to recognize our students as various awards are announced and students are inducted into Sigma Pi Sigma. For the last ten years I’ve played the role of host of this event, very much like Professor Morehouse did at my induction. When I read the charge to new members, I hope that they realize that if they take those words to heart, they have an opportunity to find a path that has been as rewarding as mine.*

I look forward to seeing some of you in Orlando. If our paths cross, please take some time to tell me about yours.

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