



The National Society of Black Physicists
Winter Edition Newsletter 2024



We Stand on the Shoulders of Giants
"If I have seen further it is by standing on the shoulders of Giants."
– Sir Isaac Newton, 1675

Special Thanks to Our Partners: NSF, the University of Tennessee Knoxville, Oak Ridge National Laboratory, and Office of Naval Research Science & Technology

Highlights from 2023 NSBP Annual Conference



A few highlights from the conference: Picture left - illustrates the kind hospitality of Prof. Adrian del Maestro and the UT department of physics, Picture middle - ORNL, Picture right - our faithful members, Jami Valentine Miller, and Farrah Simpson.

“Frontiers in Physics: From the Quantum to Materials to the Cosmos” was the theme for the 2023 NSBP annual conference. The University of Tennessee, Knoxville, kicked off our opening reception. Dr. Willie Rockward, the master of ceremony introduced the president-elect, Stephen Roberson. Additional warm greetings were given by UT Chancellor Donde Plowman and closed with remarks from president-elect. You can view the full reception on our YouTube [Watch Opening Reception video](#)



Opening Keynote Speaker: *State Representative Sam McKenzie*



Belonging and Serving: A Knoxville, Tennessee, native, Representative McKenzie matriculated at Fisk University for his physics bachelor's degree. While continuing his educational career in Tennessee, he earned his Master of Science degree from The University of Memphis. After a successful tenured career as a scientist at Oak Ridge (i.e. ~ 34 years). He continued to serve his community by becoming a state politician. The Tennessee State Representative Sam McKenzie has a heart to serve his community with distinction. [Watch the Opening Keynote Speaker.](#)

Featured Speaker for the Mental Health First Aid Session: *Jessica Harris*



Mental Health First Aid Session: Our featured speaker, Jessica Harris, opened the session by asking the participants to take part in a "Body Scan". Jessica Harris indicated that the 2nd cause of death among college students is suicide. There are many factors that are associated with Mental Health Challenges. Some factors may be identified as external factors and others may be associated with internal forces. To navigate this space and become an Ally, it is important to become properly trained. An improper understanding with respect to Mental Health First Aid could cause irreparable damage

to those we desire to help. [Mental Health First Aid.](#)



Closing Keynote Speaker: *Rashad Richey, PhD*



Physics & Interconnectedness: Our keynote speaker truly inspired us with his presentation. The power of thinking and recognizing connections were central themes in his message. Dr. Richey shared how his grandmother's desire to assist him at a young age motivated him to make one of his most revolutionary research discoveries.

Dr. Richey's Bio: Emmy-nominated national broadcaster, philanthropist, and the 2023 recipient of the Top Media Estate Award from NBC Universal/MMCA, Dr. Rashad Richey serves as Professor of Physics at Paris Graduate School (PGS) and is appointed as a Visiting Scholar at Clark Atlanta University in Atlanta, GA. His scientific

research interests include quantum mechanics, biophysics, and human cognition. Richey was awarded the President's Scholar Scholarship at PGS, where he is duly enrolled in the quantum physics doctoral program through the Department of Research. Richey's research analyzes interactions between human cognition and quanta elements, including sound frequencies, vibracoustic, and photo-biomodulation to enhance mental states. His research led to the invention of the Neurological Brain Entrainment Device (NBED), which yielded significant case study results, indicating brain plasticity and neuroregeneration may be achievable through exacting, noninvasive processes. Richey's brain en-train-ment device was granted provisional patent status by the United States Patent & Trademark Office and has been approved for clinical trials by the West Cascade Medical Center, a medical brain care facility.

[Watch Closing Luncheon video](#)

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Our Leadership in Action

With over eight hundred conference registrants, the 2023 NSBP Conference had a myriad of inspirational and exciting sessions. The Opening Reception showcased a list of Physics Elite partners for the NSBP Conference followed by activities like the Karaoke & Game Night fun. One of the highlights of the 2023 Conference was the Oak Ridge National Laboratory (ORNL) Tour. The Technical Sessions that occurred during the conference were excellent and the award winners should be proud of their accomplishments. Below are a few pictures and representative images from the 2023 NSBP conference.



During The Women's Keynote Panelist Session a few esteemed NSBP members can be seen. Caption left to right: Charles McGruder, Anthony Johnson, Wendell Hill III, and Sekazi Mtingwa.



Caption from left to right: Carol Scarlet, Kent Wallace, Willie Rockward, Donnel Walton. Last image on the right (left to right): Elon Price, Farrah Simpson, and Joshua Burrow.



Consider A Career in Industrial Research



One of my biggest questions after receiving my degree in physics was “What do I do now?” The traditional paths for newly minted physicists were either academia or work at a government lab. There was even a call from Wall Street. I took the immediate path of working in a government lab.

After all, some of the biggest physics problems were being solved by physicists and other clever engineers and scientists working in government labs. The atomic bomb was developed at Los Alamos. Men were sent to the moon and safely returned through NASA labs. Our national security was enhanced by tremendous computing efforts at the National Security Agency, and many of our health care issues have been addressed by the National Institute of Health. Why wouldn't I want to work at any one of these labs where the most fundamental laws of physics are engaged?

Working in an industrial lab involves solving practical problems that often lead to solutions that are turned into industrial or consumer products for a profit. It is basically applied physics. There are some instances where you can conduct fundamental studies that lead to a broader understanding of the universe. The discovery of the three-degree cosmic background was discovered at Bell Labs. The most successful industrial products are those that are understood from first principles. This is the advantage of a trained physicist.

As a physicist, my brand was as a problem solver. This is what we do. It afforded me the opportunity to work on a vast array of projects such as, optical communication multiplexers, pollution abatement catalytic converters in automobiles, large panel glass displays for the television industry, and medical devices for DNA sequencing to name a few. In my 35-year career at Corning Incorporated, I started as a lone bench scientist where my responsibilities grew and eventually led to an assignment as global manager for 12 research labs based in 10 countries.

An industrial career can afford you the opportunity to publish papers and to present work at international conferences. You may be able to forge collaborations with universities and other business entities. One may get the opportunity to build research labs from the ground up to suit

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the needs of the project which you might have conceived, developed and gotten funded. In essence, you become an intrapreneur within the company.

There is the chance to mentor young students and scientists on their career paths. There are even occasions where your work may be patented or set aside as a trademark secret. A career as an industrial scientist can be very satisfying and rewarding.

Gregory E. Williams, Ph.D.

Student Representative's Corner



Happy day fellow researchers! In this new year, if I had to settle on one mindset to adopt it would be to **focus**. While creating an intention and setting a goal are both great sources of motivation, remaining **focused** without burning yourself out will always help you chart a path to where you would like to be. If you feel your goal is too difficult and will take too long, try breaking it down into smaller sub-goals and celebrate all of your victories no matter how small. Running a marathon is difficult, but starting with walking a half-mile is much more achievable. If you feel your **focus** is drifting and your motivation is lost, try taking breaks to ground yourself or leaning on your community for support. Go play Minecraft or something. Whatever detour may come up along your journey, by maintaining both your health and **focus**,

you will realize your resolutions. On behalf of myself and the Student Council, we wish you much success in your academic endeavors this year!

Elon Price, Student Representative



President-Elect's Corner

Happy New Year everyone!!! 2023 was a tremendous year for the National Society of Physicists (NSBP). We officially moved into our new office space at the Optica building in Washington DC, we held our first Student Leadership Development Summit at our headquarters, and we had our 2023 annual conference in Knoxville, TN. I would like to thank our conference hosts, the University of Tennessee at Knoxville and Oak Ridge National Laboratory, for their hospitality and for their assistance allowing us to bring over approximately 800 people to Knoxville Tennessee for our annual conference. Thank you to all of our sponsors and exhibitors for your support and thank you to all of our professional and student attendees that came together to make this event a success. A special thank you goes out to our board and support staff that worked tirelessly for months to make the conference the success it was. Although I left Knoxville completely exhausted after our annual conference, my spirit was refreshed by the excitement and enthusiasm of the students, professionals, sponsors, and exhibitors that attended the conference with me.



2024 is shaping up to be an exciting year for NSBP where we continue to work towards our mission by focusing on professional growth individually and as a community of Black physicists. The mission of the National Society of Black physicists is to promote the professional well-being of African American physicists and physics students within the international scientific community. To fulfill our mission, the leadership of NSBP will be focused on soliciting funding agencies, foundations, and individuals for funds to support our activities and our membership, recruiting new and former members of NSBP to become active financial members of the

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organization, and participating activities to improve the professional image of Black people in STEM generally and NSBP members specifically.

In 2024, we are looking forward to the upcoming large meetings being held this year: the Student Leadership Development Summit in Washington DC during the month of August and our Annual Conference being held in Houston, Texas November 13-17, 2024. Both of these events will be held in partnership with the National Society of Hispanic Physicists. During this year, we are also looking forward to exciting virtual content that highlights the capabilities of our members year-round. None of these efforts planned for 2024 will be successful without the support of our members and external supporters, so we will be soliciting the assistance of everyone within NSBP to make 2024 the best year yet for the National Society of Black Physicists. Let's make it a great year, NSBP!!!

Stephen Roberson, NSBP President-Elect.

Inspiration from President



"Life is strong and fragile, it's a paradox... it's both things like quantum physics: it's a particle and a wave at the same time. It all exists all together."

Hakeem Oluseyi, NSBP President



Closing

We look forward to seeing you in Houston, Texas for the 2024 NSBP Annual Conference, November 13-17, 2024! You can view the 2023 conference plenary sessions on your [Youtube page](#).

Special Thanks to our Partners

 **National Society of Black Physicists**
2023 Annual Conference
Knoxville, TN
9-12 November

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PLENARY SESSIONS VIDEOS



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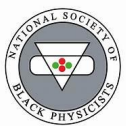


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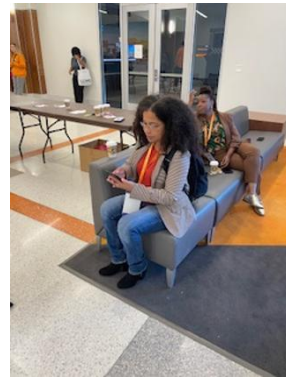
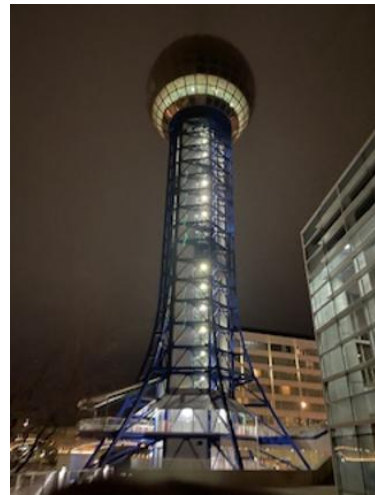


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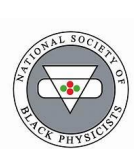




Photos from Garfield Warren



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nsbp.org

SCAN ME

NSBP was featured in the USA Times Black History Month [Edition](#) on page 31.

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