

Thousands gathered on Temple's campus to witness the solar eclipse

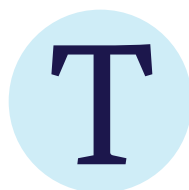
by Jonny Hart

PHOTOS: JOSEPH V. LABOLITO



BERND SURROW EARNS PRESTIGIOUS CARNELL PROFESSORSHIP

Bernd Surrow has been named a Laura H. Carnell Professor by the Temple University Office of the Provost. Carnell professorships recognize faculty who have distinguished themselves in research, scholarship, the creative arts and teaching. "Receiving the prestigious Carnell Professorship is a significant milestone in my career," said Surrow, whose research focus is investigating the structure of the proton and its underlying dynamics. "It is a testament to the guidance, mentorship and support I have been fortunate to receive over the years."



The Physics Department and CST hosted a viewing event on Temple's Main Campus for the April 8, 2024, solar eclipse, where coverage reached 90% totality. The event featured solar telescopes, free eclipse glasses, a countdown timer to peak eclipse coverage and a livestream capturing the excitement.

Thousands of visitors, both members of Temple community and neighbors, gathered on campus to celebrate the eclipse, which was the first major solar eclipse visible from the Philadelphia region since 2017. Food truck lines were packed, cameras were out, and crowd applause roared through campus as the sun—and the moon—peeked through the afternoon clouds.

More than 1,500 eclipse glasses were distributed, which crowd members used to safely view the spectacle. Feeds from the telescopes were captured and shared via livestream. A recording of the livestream can be viewed on CST's YouTube channel.

Reporters from *The Philadelphia Inquirer* and *The Temple News* were on campus to cover the viewing party, as was a camera

crew from CBS3 Philadelphia. CBS also tapped into CST's livestream of the eclipse, which the station broadcasted throughout the afternoon.

Temple's very own eclipse expert Associate Professor of Instruction Matthew Newby was also in attendance answering questions about the celestial phenomenon. John Noel, associate professor of instruction, provided technical support. Despite a few clouds in the sky, the crowd made the most of the event, and with good reason. The next time Philadelphia will see a solar eclipse with 90% coverage won't happen until May 11, 2078.



EXPLORING GUIDING PRINCIPLES OF QUANTUM MATTER

by Greg Fornaia

Jie Wang, a rising scholar with key accomplishments in the physics of matter, will help strengthen Temple's research enterprise in condensed matter physics.

Wang earned his PhD in physics from Princeton University in 2019. Before joining CST in January 2024, he was a research fellow at the Center for Computational Quantum Physics at the Flatiron Institute and then a postdoctoral fellow at the Center of Mathematical Sciences and Applications at Harvard University. Wang's research interests include exotic quantum phenomena in topological matters, their physical origin and experimental implications.

"I am interested in the guiding principle of quantum matter. Nowadays, we know many guiding principles such as symmetry, topology, geometry and anomalies, which constrain and determine phases and dynamics of quantum matter," explained Wang. "I want to understand further their roles in quantum matter and synthetic matter, their interplay, and their consequences and implications in experiments."

Wang was attracted to the Physics Department's strong condensed matter groups. "I'm also interested in exploring interdisciplinary collaborations across different departments, such as machine learning and quantum information," said Wang.



MARTHA CONSTANTINOU: TEMPLE TRAILBLAZER IN STEM

by Jonny Hart

Martha Constantinou, associate professor and Physics Department vice chair, was featured as a Temple trailblazer in STEM, celebrating accomplished women researchers.

Constantinou's research area is using theoretical and computational nuclear physics to learn more about the fundamental particles that make up the visible universe. She serves as lead principal investigator for a U.S. Department of Energy-funded project to study quarks and gluons. The collaboration is a consortium of scientists from 11 universities and three national laboratories.

Constantinou's research has been published in the *Physical Review Letters of the American Physical Society*, the *Journal of High Energy Physics*, *Nature Communications* and the *European Physical Journal*.

"My experience as a woman in STEM has been influenced by a lack of female mentors in academic settings and constant advice to consider alternative career paths," said Constantinou. "Despite these challenges, I am grateful that I persisted in pursuing a career in academia. My message to all women considering a STEM field is to not let fear hold them back from following their passion and carving out their unique path."

NEW CHAIR AND VICE-CHAIR TO LEAD PHYSICS

by Greg Fornaia

Effective January 2, 2024, Professor Maria Iavarone assumed the role of Physics Department chair. Iavarone brings with her a strong background in academia, the ability to collaborate and foster new initiatives to enhance the department's standing and a commitment to create an environment that respects and values all individuals.

"Maria is dedicated to mentoring faculty and staff, supporting their professional development and fostering an environment conducive to growth and success," said Dean Miguel Mostafá. "I am confident that she will bring fresh perspectives, innovative ideas and exceptional leadership to guide the department toward continued success."

Associate Professor Martha Constantinou now serves as vice-chair. Constantinou has demonstrated a strong commitment to the department, a distinguished record of teaching, research and scholarly achievements, and the ability to foster collaboration among faculty, staff and students.

Professor Peter Riseborough, who served as interim chair for a year and a half, will return to his research and teaching.

AIDAN COBB EARNS SMART SCHOLARSHIP

Aidan Cobb, computer science and physics sophomore, earned a Department of Defense Science, Mathematics, and Research for Transformation (SMART) Scholarship. The SMART program is a comprehensive initiative offering students full tuition for up to five years, mentorship, summer internships, a stipend and guaranteed post-graduate employment with the Department of Defense. Cobb has been developing software for data analysis with Professor Jeff Martoff's HUNTER Project, which is searching for additional "sterile" neutrinos beyond the Standard Model of particle physics.