

Forging an inclusive physics community at Tulane

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mmccrory@tulane.edu



Between the Conference for Undergraduate Women in Physics in January and the Society for Women in Physics and Engineering Physics, the physics community at Tulane is only getting stronger and more supportive. (Photo from iStock)

In January, undergraduate students from around the Gulf Coast region came to Tulane for the [Conference for Undergraduate Women in Physics](#), or CUWiP, an annual event hosted by the American Physical Society (APS) at university campuses around the country. The next event will be renamed the Conference for Undergraduate Women and Gender Minorities in Physics as part of [APS' Gender Inclusive Physics Community initiative](#).

Tulane faculty and students on the conference's [Local Organizing Committee \(LOC\)](#) had been preparing for months. They had been looking forward to this since they attended last year's conference at Auburn University with Jessica Graber, senior professor of practice in the School of Science and Engineering. "I drove some of them up to Auburn, and on the way back, they had a lot of ideas about what they wanted to do," said Graber.

Kendall Jarvis, a junior studying physics, found resources and a community at last year's conference, and it inspired her to be part of this year's LOC. "I really wanted to be that person for other women in physics that are new and don't know where to go, so that was kind of my motivation in participating," she said.

"It's such a small community of women in physics, especially here, that I think we wanted to take the reins in order to make it the most welcoming for other people," said Aubrey Augustine, another LOC member and a junior studying physics and Russian.

Tulane's Department of Physics and Engineering Physics saw 19 students graduate with bachelor's degrees in physics and engineering physics in 2023, six of whom were women, according to Tulane's Office of Institutional Research. That is approximately 31%, which is higher than the 2020 national average of women earning bachelor's degrees in physics, which is 24% according to the American Institute of Physics.

Graber graduated with her PhD in physics from Tulane in 2003, and when she arrived in 1998, was one of five new graduate students in physics, all of whom were women. "I did not ever really experience this department as difficult to navigate as a woman," she said of her time as a student.

Augustine echoed Graber's experience 20 years later, noting that because the community is so tightknit, it is harder to notice any disparities.

Next year, the conference will move to another university, but the community of women and gender minorities in physics at Tulane is not going anywhere. About five years ago, Douglas Chrisey, the Jung Chair of Materials Engineering, saw a gap in support for women in physics at Tulane and spoke with a PhD student about starting the Society for Women in Physics and Engineering Physics, or SWIPE. He is still the faculty advisor for the club but lets the students take the lead.

“My role was to get it approved as a club and then get it going,” Chrisey said, “and then step away, except to make sure that we keep it going.”

SWIPE holds lunch meetings on Fridays, where they invite professors to discuss their careers and offer advice to current students, mainly graduate students. “They don’t have to even have presentations,” said Elham Loni, a PhD student studying materials physics and the current president of SWIPE. “Sometimes they have them, sometimes they don’t have them.”

A recent meeting turned into a discussion about having children as a PhD student, she said, although discussions can center on topics from career paths to difficulties with experiments.

“I think people feel safe and feel that they are more comfortable in their research, and they feel that, ‘Okay, if there is an issue, I can share it, and I can find a solution,’” Loni said. “Or maybe others also have the same issue, and we are sharing the issue together.” The community that SWIPE has built allows the researchers to collaborate and be better physicists.

That community and spirit of collaboration are things Jarvis and Augustine appreciate about physics at Tulane, as well.

“I think Tulane overall does a good job about being more of a community and less competitive [with each other],” said Jarvis. She and Augustine have received invaluable advice from older students and try to pass on the same advice to first- and second-year students.

“I think it could get really competitive really fast,” said Augustine, “but everyone I’ve met in the physics community has been really welcoming and really willing to help you.”

The importance of a supportive and open community within Tulane reaches beyond the campus itself, Chrisey said, pointing out some of the challenges present on a global scale. “We’re lucky that we live and work in this special sort of environment, and I’d like to hope that we bring that outside of the campus, too. We bring these ideals wherever we go.”

People who are interested in joining SWIPE can contact Elham Loni at eloni@tulane.edu.