

# THE HIDDEN PRIVILEGE

BY EMILY ZHANG

Being a visible minority in physics comes with its challenges given the field's longstanding history of discrimination against women, nonbinary folk, and people of colour. These experiences are often compounded for those who are members of more than one of these groups. Although there are important efforts to increase representation, they often forget to address the hidden axis of privilege: wealth. Unlike gender and race, one's socioeconomic status is harder to presume at first glance. In this testimonial, I will use my own journey into a PhD to illustrate how the intersection of my gender, race, and social class has resulted in unique modes of inequity during my physics career.

Growing up, I never internalized the fact that I was underprivileged. My parents are first generation Chinese immigrants who did not speak English, so they struggled to provide for most of my life. My childhood was spent under the poverty line, and I went to school in a low-income, highly culturally diverse area. Not only were my parents constantly worrying about food and shelter, they were also poorly equipped to navigate the existing social and institutional structures in place to stimulate my interests in science. Nevertheless, my circumstances were comparatively better than many of my peers, some of whom were not in a place to even consider higher education — the act of which is in itself a privilege.

Being unaware of the opportunities that a degree in physics presented, I rationalized that my only choice was a mainstream career path to secure income, such as medicine or pharmacy. I spent two years in biopharmaceutical sciences before realizing that my passion for physics was worth pursuing. Faced with uncertainty, I took a leap of faith and switched programs, and the abrupt shift in demographic among my peers became immediately apparent. Not only was I one of the few women, but I was also one of the few people of colour — a drastic difference from my upbringing in a multicultural space. It was also the first time my comparatively low socioeconomic background was made apparent to me. I was not equipped with the cultural capital to navigate predominantly male, affluent, and privileged spaces. There was an incongruity between my social identity and my identity as a physicist. I felt alone.

During my studies, I worked full-time, which not only allowed me to finance my own schooling, but also to assist my parents with their debts and expenses. Becoming financially stable enabled me to create opportunities for myself, something which was not afforded to me growing up. Even so, my decision to work while studying full-time was met with confusion from my peers and professors, as physics was not the sole target of my efforts. The ability to focus purely on academic studies — a privilege held by most of my peers — was something I worked hard to obtain.

As I enter into the second year of my PhD in a newfound position of economic privilege, I can finally fully focus on my studies. Although there are fewer financial obstacles, many social and cultural barriers are still prevalent. Women of colour tend to be taken less seriously already [1,2], but this effect is amplified when people learn of my choice to work and undertake EDI activism in place of extra physics courses, despite my academic record and research experience. I feel a constant need to prove myself, reaffirmed by remarks about my unpreparedness, or implications that my accolades are due to my identity rather than my scientific abilities. These small but constant microaggressions have built up in me over time, proving more harmful than absurd racist and sexist remarks that can be easily dismissed.

I share my experiences in hopes of lessening the isolation felt by the minority of people who can relate to my hardships. Physics institutions are gradually moving toward a more diverse and equitable environment, but there is much work to be done. We need to inform future outreach to take a more longitudinal and holistic approach - one that accounts for gender, race, and socioeconomic background. Before programs that address equity, diversity, and inclusion can begin to take effect on an intended individual, the identity of the individual must be commensurate with that of a physicist, and that requires a fundamental demographic and cultural shift in our community. I encourage those who hold positions of privilege to be open-minded, and those who identify with my story to share their own experiences, as our perspectives are crucial for creating understanding and a more inclusive environment in physics.



Emily Zhang  
<ezhang@physics.utoronto.ca>  
Department of  
Physics, Centre for  
Quantum Materials,  
University of Toronto,  
Toronto, Ontario

## REFERENCES

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