

Contributions to Diversity: Philip Tanedo

Personal Background

I was drawn to science from an early age, but I bore little resemblance to my heroes in my field: white men who shared neither my brown skin nor the accents of my Filipino immigrant parents. I later came out as a gay teenager at a time when people debated whether to accept homosexuals into their neighborhoods, let alone into academia. Despite this, I excelled in my university coursework and research, even as my ‘otherness’ became more pronounced. I went on to be one of the first Filipino-Americans and the first Stanford physics major to win the Marshall Scholarship. I was both the only non-white and only openly gay undergraduate student in my department’s graduation ceremony that year.

This was a microcosm of broader demographics. Despite being part of the second largest Asian ancestry group in the country, there are no Filipino faculty in particle physics in the U.S. nor any, to my knowledge, across the physical sciences. In fact, only 8% of Filipino-Americans have advanced degrees compared to 20% of Asian-Americans as a whole [2]. This is part of a larger trend of marked educational underrepresentation of Southeast Asians and Pacific Islanders [3]. Further, the proportion of all LGBT-identified adults decreases with both income and education [4].

Addressing Challenges

Some reasons for this are clear. When you’re the first in your family to attend a four-year university, it takes resourcefulness to find academic mentors. It takes courage to ask questions in class when you’re the only brown hand to raise. It takes patience when senior colleagues mistakenly assume the gender of your partner and poise to constructively correct them.

I found that visibility can go a long way to combat these trends. Whether taking my same-sex, different-race partner to social events or being an active member of the ‘queer and Asian’ community, there were concrete ways to challenge the underrepresentation of minorities in academia. I have had students thank me because they were glad that they weren’t the ‘only gay person trying to do physics.’ It wasn’t only that minorities need to ‘come out’ to the physics community, physicists also need to ‘come out’ to their minority communities.

In 2009, I joined the US/LHC blog [6] to promote particle physics to the public. My posts—which combined expository writing with accessible cartoons—became a hit: pieces from my blog appear in two books [7], were translated into Japanese [8], and led to an invitation to author a textbook [9]. I found support in a scientific writing community with a large number of academic minorities who, similarly, saw blogging as a way to reach out to people like ourselves. While visibility is a step against underrepresentation, blogging was a framework to go further by initiating a dialogue about issues that face minorities in academia. It broadcasts that brown-skinned, gay physicists from immigrant families not only exist, but have found ways to overcome the roadblocks that deter more people like them from entering the field. As a graduate student and a postdoctoral scholar, I was awarded a Paul & Daisy Soros Foundation Fellowship for New Americans—a graduate fellowship for first and second generation immigrants—and later a UCI Chancellor’s ADVANCE fellowship to contribute to equity and diversity within the UC system. These groups have provided a broad network of colleagues and allies who are committed to finding ways to reach out to underrepresented groups in academia within our research missions.

Looking Forward

As a faculty member, I intend to continue to support underrepresented minorities and find look forward to ways to contribute to targeted mentoring. I would like to network with existing on-campus groups to find constructive ways in which I could contribute to ongoing efforts; these may include workshops or panels on navigating academia—as I have participated in at UCI as a Chancellor’s ADVANCE fellow—or developing broader outreach programs such as student-driven science blogging.

I intend to continue my involvement with recent American Physical Society (APS initiatives to support diversity in physics: the national mentoring community [11], the APS ad hoc committee on LGBT issues [10], and the APS Bridge Program [12]. The Bridge Program is especially promising as a retention tool: it supports promising undergraduates from underrepresented backgrounds who may have lacked the mentorship to be competitive for graduate programs. These are high-achieving students who, for no fault of their own, did not receive the guidance to seek out undergraduate research opportunities to take the GRE exams. The Bridge Program gives these students who have already demonstrated high capacity to succeed a second chance to hone research skills and apply for postgraduate programs. I am interested in developing the infrastructure to host a Bridge student, but will also be proactive to identify students amongst the undergraduates who may be strong Bridge applicants at other universities.

Within my own research and teaching activities, I hope to foster a supportive and safe environment for all students, with particular understanding and sensitivity to those students for whom being a physicist may feel contrary to other identities. In my teaching I will emphasize a policy of openness and invite feedback from students to point out places where micro-aggressions in the classroom may unwittingly create a negative environment. I will further make clear the support structures that exist outside of the course, such as student organizations, a department ombudsperson, or relevant university programs. For the graduate students in my own group, I am committed to constructive ways to address impostor’s syndrome. One possible way to do this that has been effective for colleagues in other universities is to host an informal ‘safe place’ coffee time to discuss issues of equity in academia among underrepresented graduate students.

I look forward to being able to draw from my own personal experiences as a minority in academia as well as the experiences of those around me to find ways in which we can support equity and diversity in the university.

References

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