

## CONTRIBUTIONS TO DIVERSITY, EQUITY AND INCLUSION

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### PAST AND CURRENT ACTIVITIES

I have been actively interested in issues of diversity, equity and inclusion within mathematics and higher education more broadly at all levels: as an undergraduate student at the University of Cambridge in the United Kingdom (UK), a graduate student at Stanford University, a Visiting Assistant Professor at the University of California, San Diego (UCSD) and a Postdoctoral Instructor at the University of Texas at Austin (UT Austin) in the United States (US). My main contributions have been through my activity as a member of the Hellenic community, my action as a mentor in various capacities and advocate for under-represented groups and minorities and participation in outreach programs at the K-12 level.

Being myself from a small town (Mytilene) on an island (Lesvos) in the periphery of Greece, I have personally experienced and am aware of the challenges in terms of scarcity of information and resources that one must overcome coming from such a socioeconomic background. Throughout my academic path I have informally advised several students from Greece, from my hometown and elsewhere, interested in pursuing educational opportunities in the UK and the US, both at the undergraduate and graduate level. Several of them were successful and have studied at Cambridge, Stanford and other universities.

As a member of the Committee of the Hellenic Society of the University of Cambridge for the academic year 2010-2011, I contributed to the establishment of a scholarship for Greek citizens, who wish to pursue undergraduate studies at Cambridge. This scholarship was awarded for the first time in the academic year 2011-2012 to a student from the Greek island of Crete and was particularly aimed at students from disadvantaged financial backgrounds who exhibit excellent academic achievement.

As a graduate student at Stanford, I provided advice and support to Greek undergraduate students regarding academic and personal matters, when it comes to adjusting to a new country and environment. I was also directly involved with the organization and activities of the program “Educational Trip” as a member of the Greek Student Association of Stanford (Hell.A.S.). The program provides the opportunity to 24 undergraduate students from Greece each year to visit five US Universities (one of which is Stanford) and acclimates them to academic life in the US.

In addition, through SURIM, a Stanford undergraduate research summer program in mathematics, I was a graduate student mentor for 10 weeks during the summer of 2016 for a group of four students including a first-year female undergraduate Stanford student. I strongly advocated for an equitable selection of students in terms of gender representation to the extent possible given the pool of candidates. We met at least twice per week and I worked hard to make sure she felt included and comfortable among her peers and had a positive and rewarding mathematical experience. By the end of the program, she was one of the most energetic and actively contributing members of our group.

During my stints at UCSD and UT Austin, in my capacity as an educator, I have actively tried to follow pedagogical practices that promote a welcoming, equitable and inclusive environment, also utilizing my personal experience and socioeconomic background as an educational “immigrant” in order to stay cognizant of ethnic and socioeconomic barriers and difficulties students might be facing. I consciously try to be approachable and encourage students to communicate about hindrances to their educational experience and seek support and advice. Besides such interactions in an office setting, I participated in the UCSD program “Dine-With-a-Prof” and “Coffee-With-a-Prof” with many students, including several from under-represented backgrounds and minorities, which allowed for productive discussions in a more informal setting.

Furthermore, during the Winter quarter of 2020, as part of the UCSD Research Communications program and in collaboration with a mathematics teacher at a K-12 school in the San Diego area, we organized and delivered a series of three presentations to communicate modern ideas in algebraic geometry to students and parents using a variety of visual metaphors, group activities and art media. I was glad to see that the meetings attracted a large number of students from various grades and diverse backgrounds and sparked their interest and excitement towards mathematics, science and geometry in particular. In addition, in collaboration with the Division of Physical Sciences at UCSD, we made a short YouTube video, a research brief on my work intended for public outreach, available here: <https://www.youtube.com/watch?v=CrE1And8bD0>.

During the Spring quarter of 2021, I mentored one graduate student through the one-to-one mentoring program of the UCSD Chapter of the Association of Women in Mathematics, whose aim is to create an inclusive environment in the mathematical community and promote the professional development of young mathematicians. I also gave an introductory talk on diophantine equations in the Pizza Seminar organized by the Mathematicians of Color Alliance of Texas (MoCAT) which discussed background material for Anthony Várilly-Alvarado's talk in the Distinguished Mathematicians of Color Colloquium Series of MoCAT.

During the academic year 2022-2023, I am volunteering at the Prison Mathematics Project as a mentor, being a pen pal for an incarcerated adult to provide support and guidance for a self-education course in algebra. In the Spring semester of 2023, I also intend to volunteer through the Texas Prison Education Initiative, a UT-affiliated organization, as a teacher for a credit-bearing mathematics college course for incarcerated youth and adults.

#### FUTURE PLANS

In the next step of my academic career as an Assistant Professor, I would like to continue my engagement and assume an even more active role in promoting diversity, equity and inclusion. As a member of the mathematical community, I consider myself responsible to:

- establish a welcoming, respectful and inclusive atmosphere for all.
- contribute to the breaking of socioeconomic, racial, gender and identity related barriers.
- be an ally and advocate for under-represented and under-privileged groups in mathematics and academia in general.

I believe that we still have a lot of work to do as a community, collectively and individually. Substantial progress in resolving existing issues regarding equality and representation is due not only on ethical and societal grounds but will also create a healthier and enriched environment. This will undoubtedly enhance the mathematical experience and be conducive to important scientific breakthroughs as well.

To this end, I plan to:

- Continue working on outreach for higher education and science in particular at the K-12 level by teaming up with local teachers. This can also be a great way to encourage more young women and people of color to enter the mathematical community.
- Serve in departmental initiatives and committees that aim to alleviate issues of gender and racial inequality and initiate or take part in existing outreach programs to that effect.
- Become involved with (or spearhead) the activities of the local chapter of the Association of Women in Mathematics as a potential faculty advisor.
- Use my platform as an educator and researcher to actively support students from under-privileged backgrounds and under-represented groups and minorities:

As a teacher, I always strive to create an encouraging, inclusive environment for all and be a point of advice and support. I also energetically encourage interested students to consider taking individual reading courses with me to get a sense of more research-style math.

As a potential member of admission and hiring committees for students and postdocs, I will advocate in support of women and gender minorities, people of color and students belonging in minority groups at a level ensuring equitable representation and affording everyone equal opportunity.

As a research advisor, I will make myself available to students and postdocs as a resource. My door will be open for discussions about departmental atmosphere and inclusivity and to provide guidance and share my experience, whenever possible, on topics related to professional development of young mathematicians.

As a potential (co-)organizer of research seminars and colloquia, I will support the invitation of an equal number of men and women (and people of different gender identity), including a significant number of early career mathematicians, as an immediate, realistic step in achieving a more equitable gender representation and actively promoting the work of younger mathematicians.