

NETWORK OF MATHEMATICIANS OF COLOR II

organized by
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Workshop Summary

Overview. This focus of this workshop was to bring together a small group of black mathematicians to generate ideas for to better integrate the community of black mathematicians and make the community more visible to the entire mathematics community. During the workshop, there were three main areas of focus that were chosen for participants to pursue/develop. These areas were : (1) developing a professional development workshop for new faculty members of color, (2) building and fostering connections with K12 education, and (3) creating a graduate bridge program for men of color. While extensive time was put into the aforementioned projects, two other substantial discussions took place surrounding the Division of Mathematical Sciences at NSF as well as the development of a website/database of black mathematicians.

Faculty Development Workshop for New Faculty. We planned the creation of a workshop for newly hired black faculty members. This workshop will be designed to give these new faculty members a sense of community outside of their department as well as address topics/issues that departments are failing in supporting their faculty of color. This program is targeted towards two groups of participants : those about to start their first faculty position and those who are currently applying to their first faculty positions. We will host these workshops in August 2020 with a cohort of approximately 8 newly hired faculty members and in December of 2020 with invitations being extended to the August 2020 cohort as well as individuals who are applying for their first tenure-track faculty position. We have identified similar programs in neighboring academic fields (CMD-IT Academic Careers Workshop, Denice Denton Emerging Leaders Workshop, AIM Careers in Academia Workshop) as well as a list of potential topics to be covered in the workshop (Funding/panels, Tenure Process/Portfolio, Collaboration, Understanding different ways to be successful in academia, the Minority Tax, etc.). We have also identified potential host institutions/organizations willing to support/fund these activities for 2020 and 2021. The long-term plan is to submit this program for consideration to be a part of the next funding proposal for Diversity Initiatives under the NSF Mathematical Sciences Institutes. Committees have been formed, tasks have been delegated, and it is our intention to run this program for the first cohort of new faculty in August 2020.

Connections with K-12 Education. We continued to work on the idea of a “Pitch on the Go” model. The “Pitch on the Go” model is a service opportunity for conference participants to volunteer at local schools /Community Centers on math activities during the conference. We had extensive conversations with Briana Donaldson regarding how to use the Math Teacher’s Circle Network in order to make contact with local communities. We also discussed the content of a classroom/community visit. We decided that it should generally include a

description of the profession (i.e. “What does it mean to be a mathematician?”) also should include a math story about how mathematics has been a critical part in some current/recent event. There should also be some hands-on interactive activity for students to participate in. We’ve identified some sources for these materials (Math Circles, The Julia Robinson Festival Activities, etc.). It seems that the biggest barrier to this is getting in contact and complying with each school/community center. Briana has offered to help us with this. Aris Winger intends to pilot these activities in 2020.

Bridge for Black Men. This group explored the possibilities, challenges, and feasibility of creating an “EDGE” program for black men who are matriculating into graduate school for Mathematics, Statistics or Operations Research. It is believed that no major changes needed to be made from the original (and existing) EDGE program.

The group came up with an action plan to get started in Summer 2020. While we have a plan in place to find sustainable mechanisms of funding for future years (grants, math institutes, etc.), we plan to run a pilot program in Summer 2020 for 5-6 men of color. These men are to either be starting a graduate program in the mathematical sciences in Fall 2020 or be returning to their second year of graduate school in the mathematical sciences in Fall 2020. The 2020 program will be held in conjunction with the SPIRAL REU at American University in Washington, D.C. The local lead will be Monica Jackson, Associate Dean, CAS Undergraduate Studies, Department of Mathematics & Statistics. The program will run for six weeks. Participants will fully engage with the SPIRAL program for the first 3 weeks of the program. During this time, courses taught by the SPIRAL facilitators (Monica Jackson, Dennis Davenport, Leon Woodson) will be offered. For the latter half of the program, participants will engage in intensive coursework designed to emulate the pressures/pace of graduate courses. The plan would be to offer two intensive courses : analysis and linear algebra. Traditional days will consist of lectures in the morning followed by problem sessions in the afternoon. We plan to implement a number of extracurricular/community building activities including : scientific field-trips, panel discussions, mini-courses in computational science, workshops on developing a network of mentors/support.

We have identified possible facilitators/faculty. As well developed a plan to find funding for the 2020 program. Committees are in place for the following tasks : local coordination, invitations, applications, and securing funding. We have also identified a committee to work on putting together a full proposal to be prepared and submitted towards the end of 2020 for future/sustainable funding for the program.

Discussion with Juan Meza. We were fortunate to have Juan Meza with us on the second day of the workshop. This was a very fruitful discussion that touched on a number of topics. Juan informed the group of two efforts in DMS : 1) There has been a noticeable decrease in requests for funding to support graduate students. He is now working to reverse this trend and is requesting that our proposals reflect this. 2) There is a workshop in August in which NSF hosts a number of new faculty members to let them visit the NSF. This visit includes professional development as well as mock panels to review proposals. In 2019, of the 130 scientists, only 10 of them were from mathematics. Juan intends to host such an event only for mathematicians in 2020.

In addition to the above-mentioned initiatives, there was serious discussion surrounding negative experiences of black scientists while serving on NSF panels. Juan facilitated a discussion about the issues with the process and invited us to give him our concerns and

recommendations. A document reflecting this discussion has been written and submitted to Prof. Meza for his consideration.

Website/Database of Black Mathematicians. There are a number of initiatives in the works to develop various websites containing information about minority mathematicians. The National Association of Mathematicians (NAM) has continued its partnership with Varsity Software to update Scott Williams' pages "Mathematicians of the African Diaspora" (<http://www.math.buffalo.edu/mad/>). Williams created the pages in 1997 to showcase more than 500 individuals from the African Diaspora who are connected to the mathematical sciences. Williams retired in 2008, and has not updated his pages since. NAM decided to take on the task of updating the pages by migrating the data from the original MAD Pages to a database. Although there were delays in 2019, the new website/database have been updated with all of the current mathematicians of the African Diaspora. The intention is for the website to go live by February 2020.

In addition to the MAD pages, there have been other efforts to create/maintain a website of minority mathematicians. The Math Institutes have supported the development of a website to do just that. This website will allow users to input their name, email, website, Math Subject Classification, as well as a picture. This website will be ready to roll out in 2020, with support from the Institutes to run the website for one year. There was discussion about how to link this website/database with the NAM database.

Both websites are near finished, but still in the late development stages. We will keep an eye on these developments in hopes of finding mutually beneficial ways to merge workloads in the future.