## National Association of Mathematicians



Founded 1969

# Newsletter 

Volume L
Number 4
Winter 2019

## Contents

From the Editor ..... 2
Publishing in the Newsletter ..... 3
Howard University President's Letteron the Passing of James Donaldson .... 4

A California Community College Response to Assembly Bill 705 and Its Impact on Math Placement5
GEMS IN STEM Awards in 2020: An In-spirational Innovation for Math Majors .. 8Announcing the Clarence StephensAbdulalim Shabazz Teaching Award . . 11
Bridging the Cultural Divide to Lead the NIST DLMF Tables Project ..... 12
NAM Member Activities at 2019 Soci-ety for the Advancement of Chicanosand Native Americans in Science (SAC-NAS) Annual Meeting .................... 13
NAM Calendar ..... 26
NAM Board of Directors ..... 28
NAM Membership Form ..... 29

## Honoring NAM Founding Member, Dr. James Donaldson



Dr. James Donaldson (Howard University) will be remembered as a wise counselor, prolific mathematician, and true Southern gentleman

# The National Association of Mathematicians (NAM) 

publishes the NAM Newsletter four times per year.

## Editor

Dr. Omayra Ortega (Sonoma State University)
editor@nam-math.org
www.omayraortega.com/

## Editorial Board

Dr. Mohammad K. Azarian (University of Evansville) azarian@evansville.edu
http://faculty.evansville.edu/ma3/
Dr. Abba Gumel (Arizona State University) agumel@asu.edu
https://math.la.asu.edu/~gumel
Ms. Noelle Sawyer (Wesleyan University)
nsawyer@wesleyan.edu
https://noellesawyer.com
NAM's History and Goals: The National Association of Mathematicians, Inc. (known as NAM) was founded in 1969. NAM, a
nonprofit professional organization, has always had as its main objectives, the promotion of excellence in the mathematical sciences and the promotion and mathematical development of under-represented minority mathematicians and mathematics students. It also aims to address the issue of the serious shortage of minorities in the workforce of mathematical scientists.

NAM's National Office, subscriptions and membership: Dr. Roselyn E. Williams, Secretary-Treasurer, National Association of Mathematicians, P.O. Box 5766, Tallahassee, Florida 32314-5766; (850) 412-5236; e-mail: secretary-treasurer@nam-math.org

NAM's Official Webpage: http://www.nam-math.org
Newsletter Website: The NAM website has a list of employment as well as summer opportunities on the Advertisements page It also features past editions of the Newsletter on the Archives page

Letters to the editor and articles should be addressed to Dr. Omayra Ortega via e-mail to editor@nam-math.org

## From the Editor


"The greatness of a community is most accurately measured by the compassionate actions of its members."

- Coretta Scott King.

Hello everyone!
I hope that your classes are coming to a fruitful ending and your research and other projects are progressing nicely. At my home institution, Sonoma State University, our semester was disrupted by the power outages and mandatory evacuations caused by the nearby Kinkaid Fire. Although our semester was interrupted, our community came together to strategize how to get back on track with our syllabii and how to support students, staff, and faculty affected by the fires. Our department even received a much appreciated care package from the math department at our sister campus, Humboldt State University. It is because of this communal spirit and willingness
to work together that the community at Sonoma State continues to thrive and persevere.

In the same vein, I want to appeal to you, our readers, to support NAM to thrive by donating to the Golden Anniversary Capital Campaign and by becoming a member of NAM. Now is the time to renew your NAM membership if you already are a member or to become a member of NAM if you are not yet a member. The last two pages of this newsletter contain information on how you can donate to the campaign and how you can renew your membership or become a member of NAM. The funds that we receive through these two campaigns support our yearly programming.

I hope to see many of you at the Joint Mathematics Meetings in Denver in January where NAM will be sponsoring the Haynes-Granville-Browne Session of Presentations by Recent Doctoral Recipients, the Cox-Talbot Lecture, the NAM Lifetime Achievement Award, a Panel Discussion, and the Claytor-Woodard Lecture. Be well!

Sincerely, Dr. Omayra Ortega

## Publishing in the NAM Newsletter

Submissions: The NAM Newsletter is a quarterly publication. Articles and letters should be submitted electronically to the editor at editor@nam-math.org. You can find more information at the web page

```
https://www.nam-math.org/submitting-advertisements-and-articles.html
```


## Advertising:

NAM Online Advertisement Policy: As a part of its Newsletter Advertising, a copy of the advertisement will be placed on the web during the period it appears in the quarterly Newsletter - at the Job Openings website.

NAM Newsletter Print Advertisement Policy for Non-institutional Members: Receipt of your announcement will be acknowledged. You will be billed after the advertisement appears. A copy of the advertisement will be placed on the NAM Newsletter website during the period it appears in the NAM Newsletter. To estimate the page size, use 12 point font on a standard size page.

1. One issue advertising

| A. One-fourth page | $\$ 200$ |
| :--- | :--- |
| B. One-third page | $\$ 300$ |
| C. One-half page | $\$ 400$ |


| D. Two-thirds page | $\$ 500$ |
| :--- | :--- |
| E. Three-fourths page | $\$ 600$ |
| F. One whole page | $\$ 800$ |

*advertisements over one page are pro-rated
2. Consecutive, multiple issue advertising

Each consecutive issue thereafter $75 \%$ of the first issue charge.
NAM Newsletter Print Advertisement Policy for Institutional Members: Receipt of your announcement will be acknowledged. You will be billed after the advertisement appears. Institutional Members of NAM are entitled to one $1 / 4$ page advertisement at $1 / 2$ the regular price during the fiscal year of their membership. Additional advertisements follow the above stated cost structure. A copy of the advertisement will placed on the NAM Newsletter website during the period it appears in the NAM Newsletter. To estimate the page size, use 12 pt font in your favorite word processing program on a standard size page.

Deadlines: The deadlines for submissions and advertisements can be found in the following table.

| Edition | Deadline |
| :--- | :--- |
| Spring | February 13 |
| Summer | May 13 |


| Edition | Deadline |
| :--- | :--- |
| Fall | August 13 |
| Winter | November 13 |

Advertisements should be submitted electronically to the editor at editor@nam-math.org, or by postal mail to Dr. Omayra Ortega, NAM Newsletter, Sonoma State University, Department of Mathematics and Statistics, 1801 E. Cotati Ave., Rohnert Park CA 94928.

We reserve the right to reject any advertising that is not consistent with the stated goals of NAM, or that is in any way deemed inappropriate.

# Howard University President's Letter on the Passing of James Donaldson 

by Wayne A. I. Frederick, M.D., MBA


#### Abstract

This letter is reprinted with permission from the Howard University Newsroom https://newsroom. howard. edu/newsroom/article /11391/celebrating-life-james-donaldson-phd


Dear Howard University Community,
James A. Donaldson, Ph.D., a wise counselor, prolific mathematician, and true Southern gentleman departed this Earth.

James A. Donaldson was born in 1941 on a farm in Madison County, Florida, as one of 11 children to parents Audrey Brown and Oliver Donaldson. After graduating from high school, Donaldson enrolled at Lincoln University near Oxford, Pennsylvania, in 1957, and graduated from there in 1961 with his A.B. degree in mathematics. Donaldson continued his studies at the University of Illinois Urbana-Champaign, where he received his M.S. degree in mathematics in 1963, and his Ph.D. degree in mathematics in 1965.

As the University's oldest and largest academic unit, the College of Arts and Sciences (COAS) has long committed itself to uphold the University's mission as the flagship. Its dean, to that ends, is considered the "captain of the flagship." On November 1, 1999, Dr. James A. Donaldson became dean of the College of Arts and Sciences.

Dean Donaldson joined the faculty at Howard for the first time in 1965, staying only one year before joining the faculty permanently in 1971 as a professor in the Department of Mathematics. He served as chairman of the department from 1972-90, played an integral role in the development of its Ph.D. program in mathematics - the first and only doctoral program at a Historically Black College and University (HBCU) -and oversaw the development of tenured faculty.

Dean Donaldson was a humble leader who made the welfare of students one of the primary concerns of his administration. He also made faculty development and alumni relations critical priorities throughout his tenure. Upon stepping down from his role as dean in 2013, students, faculty, staff and alumni participated in honoring him - evidence of his support and influence. He was a freedom fighter, in the tradition of many lu-
minaries who also walked the walls of Alain Locke Hall, he navigated the tough terrains of the academe to secure the way for the next generation of trailblazers, academicians and leaders.


Dr. James Donaldson
There were many initiatives introduced through COAS and completed during Dean Donaldson's tenure, including the publication of the seven-volume report on the New York African Burial Ground project; the development of more than 10 summer study abroad programs; the unanimously approved (by students) assessment of a Study Abroad fee to support international travel and global programming within the University; the re-imagining of the Freshman Seminar program; the launching and expansion of the Undergraduate Research Symposium; and, the presentation of highlighted activities of the college in The Flagship newsletter.

In the tradition of deans of COAS, Dean Donaldson returned to the classroom and his scholarly love of mathematics after his successful tenure as captain.

Dean Donaldson served on committees of several professional mathematics and science organizations. He was a member of the Council of the American Mathematical Society, served as the second vice president of the Mathematical Association of America, and was the editor of the National Association of Mathematicians Newsletter. Dean Donaldson's research interests included the history of mathematics and mathematics accessibility issues, and he published more than 50 research papers, articles, and presentations in these areas as well.

We salute his service to the University as a profes-
sor, chairman, dean, scholar and friend.
Please join me in consoling and lifting in prayer his family and every life he impacted throughout his tenure at Howard.

Excellence in Truth and Service,
Wayne A. I. Frederick, M.D., MBA President

Wayne A. I. Frederick is the 17 th President of Howard University. He can be reached at hupresident@howard.edu.

## A California Community College Response to Assembly Bill 705 and Its Impact on Math Placement

by Jamylle Carter

This article originally appeared in the MAA Math Values Blog on October 10, 2019.
"I'm kind of nervous about being in this class. Last year I wouldn't have been able to take statistics because I hadn't finished intermediate algebra. Do you really think I can do this?"

This question came from a returning adult student ("Lori") on the first day of our elementary statistics class with co-requisite support: a concurrent support course that offers just-in-time remediation, study skills, and other tools for academic success in the required course. I met Lori last semester when her son ("Dorian") was in my statistics class. Lori was excited to return to school along with her son. Since her son Dorian had aced statistics, she knew that he would be her tutor. Still, she was nervous. After she asked her question, several students nodded in agreement - they were all anxious about taking statistics.

This semester (Fall 2019) is the first time that my school Diablo Valley College (DVC), a two-year community college in the San Francisco Bay Area, is offering co-requisite support courses amended to our trigonometry, college algebra, and statistics courses. In the past, students would have needed intermedi-
ate algebra as a prerequisite before they could take these courses. Now, students without intermediate algebra can enroll directly into math courses that apply to their major if they also enroll in a corequisite support course. How Did We Get Here?

My colleague Katrina Keating, Ed.D., a professor of mathematics at DVC, summarizes the scenario in her dissertation: "California community colleges are open- access institutions that admit students regardless of their level of preparation, but students must fulfill a mathematics requirement to earn an associate's degree or to transfer to a four-year institution. Yet there is no single, shared definition of what it means to be ready for transfer-level mathematics. For the majority of California Community Colleges, readiness is determined by how well a student performs on an assessment/placement test (Ngo \& Kwon, 2014; Perry et al., 2010; Regional Educational Lab (REL) West at WestEd, 2011). Thus, a student's time at the community college - and their likelihood of finishing by earning a degree or transferring - is greatly influenced by a test that only provides a single snapshot in time, rather than giving credit for existing knowledge and past coursework (Center for K-

12 Advancement and Performance Management at ETS, 2010; Hayward \& Willett, 2014; Hern \& Snell, 2010)."

Many community college students did not understand the importance of the assessment/placement test. Some students would take the test cold, with no review of previously taken math courses. They might make a mistake on fractions and be forced into an arithmetic course even though they had taken calculus in high school. Since placement tests were having such a devastating effect on students, community colleges could have been augmenting the placement tests with another method of measuring a student's background and capability. Unfortunately, they did not, despite a directive from a lawsuit brought by the Mexican American Legal Defense and Education Fund.

DVC Vice President of Instruction Mary Gutierrez, Ed.D., gives a historical synopsis in her dissertation [Gutierrez, Mary. Acceleration and Community College English: Community of Practice, Equity, and Institutional Change. 2018. San Francisco State University. EdD dissertation]: "For decades, California legislators and community college officials have been aware that colleges' use of assessment tests for placement bars some collegeready students from college-level courses and instead forces them into remediation. The SeymourCampbell Matriculation Act of 1986 stipulated that assessment tests 'be used as an advisory tool only' but resulted in no change to the practice of using these tests for mandatory placement. In an effort to force compliance with the act, in 1988 the Mexican American Legal Defense and Education Fund (MALDEF) brought a lawsuit on behalf of student plaintiffs against Fullerton College and the California Community Colleges (CCC) chancellor. The suit provided evidence that Fullerton's use of assessment tests resulted in discrimination against students who were denied equitable access to college- level classes and transfer opportunities. The MALDEF suit intended to force compliance with the 1986 Seymour-Campbell Matriculation Act. Instead, when the suit was settled in 1991, it resulted in new Title 5 regulations but no change in practice. The MALDEF victory was a victory in rule rather than effect."

Despite the MALDEF settlement, most California community college students continued to be placed in remedial courses, get stuck there, and ultimately not move on to college-level coursework. So further action was needed.

Enter California Assembly Bill 705 [SeymourCampbell Student Success Act of 2012] Gutierrez continues her analysis: "In September 2017, members of the California State Assembly and Senate demonstrated their concern about students' lack of access and progress to college-level courses in California community colleges by unanimously passing Assembly Bill 705 [the Seymour-Campbell Student Success Act of 2012] ." By Fall 2019, every California community college is required "to maximize the probability that the student will enter and complete transfer-level coursework in English and mathematics within a one-year timeframe." In addition, "Assembly Bill 705 mandates that placement be informed by high school transcripts for entering community college students, effectively reducing barriers to college-level courses and increasing equitable placement into college-level English and math" (Gutierrez, 2018).

How the DVC Math Department Responded. This new state mandate has forced my department (at the DVC Pleasant Hill Campus) to rethink our course offerings. After receiving recommendations from the California Community Colleges Chancellor's Office, my department decided that a co-requisite model would best meet our needs. Faculty in the department recognize the challenges of admitting students that were previously labeled "not college-ready" into our transferlevel courses. But many of us also see this as a huge opportunity to meet students where they are and support their success in these courses. Now the onus is on us as faculty to connect and engage with students in a way that we haven't been doing. This whole way of thinking is about giving students opportunities to engage with college-level material earlier. Before Assembly Bill 705 (AB705), students had to prove that they were capable of doing collegelevel work. Now we as faculty must recognize that many students are, in fact, college-ready, if we give them the right support.

In the summer of 2018, my department created
an AB705 Math Coordinator position with $50 \%$ release time to supervise our AB705 compliance and oversee the transformation of our departmental practices and course structure. Mathematics Professor Lindsey Lang has been leading us masterfully through this transition for the past three semesters. With her vision and guidance, the department has created co-requisite support courses with embedded peer tutors and counselors for our trigonometry, college algebra, and statistics courses. Instructors of these support courses have formed communities of practice to share materials, experiences, and strategies with one another. Initially when I first learned about AB705, I was somewhat annoyed that California lawmakers were telling me how to teach. I knew that I had to comply with the law, but I resented the state's intrusion into my classroom. Now that I understand the impetus behind AB705, I welcome it, but I'm still cautious about the challenges of teaching co-requisite courses. Although statis-
tics requires very little knowledge of prior mathematics (arithmetic and a basic understanding of linear equations), trigonometry and college algebra require much more. Nonetheless, as Uri Treisman noted in his recent webinar Math Placement Trends and Innovations That Increase Equitable Access and Success - A Practical Guide, "we're discovering that the co-requisites work." My colleagues and I certainly hope so.

On that first day of statistics class, when Lori asked whether I thought she could do this, I smiled widely at her, thanked her for her question, and answered enthusiastically and unequivocally, "Yes! I know you can do this!" The door is open. Let's see how many students walk through.

Jamylle Carter is a professor at Diablo Valley College and serves as the Community College representative on the NAM Board. She can be reached at community-member@nam-math.org.


# GEMS IN STEM Awards in 2020: An Inspirational Innovation for Math Majors <br> by Jacqueline Brannon-Giles and Dr. Willie Taylor 

Dr. Willie Taylor, a professor of mathematics at Texas Southern University, exhibits creativity in mathematics and in music. He has published more than 40 mathematical research articles. He is recognized as a "gem" in the mathematics community because of his patience, and productivity.


His belief is that many gifted students should be encouraged to persevere to attain bachelors, masters and PhDs in STEM, especially in the mathematical sciences. Dr. Taylor is giving back to his students. He has created several awards to encourage minority students to excel in mathematics.

Three of these awards are listed below:

- GEM3 (Great Expectations in Mathematics for Minority Males)
- GEM2S (Great Expectations in Mathematics for Minority Students)
- HAMP (High Achievement in Mathematics is Possible)
Each award comes with a cash prize up to $\$ 1000$.
The first recipient of the GEM3 award was Patrick Perkins, a senior mathematics major and Louis Stokes Alliance for Minority Participation (LSAMP) scholar at Texas Southern University. The GEM2S award is expected to be given out during an awards ceremony in Spring 2020. Freshmen LSAMP scholars that make a grade of A in Calculus 1 and are mathematics majors are eligible for the GEM2S award. Dr. Taylor's vision of inspiring greater expectations of minority students is an integral part of a strategy to maintain and sustain

HBCU STEM programs in states such as Texas, Louisiana, Arkansas and Mississippi.

In 2019, Dr. Taylor's work was recognized and honored by the National Association of Mathematicians (NAM). In the past, on December 9, 2017, Dr. Willie E. Taylor was honored at the African American Library in Houston, Texas as a GEM IN STEM. Dr. Taylor, a mathematician and jazz musician, has inspired and established rapport with many mathematics majors who have received masters and PhDs. He holds the honor of being the first African American male to receive the PhD in mathematics from the University of Houston. A mayoral proclamation was presented to him at the African American Library, a division of the Houston Public Library.


Dr. Taylor is affectionately recognized as a "historical gem" in the professional mathematics community in the Southwest. His mission is to continue to advocate for the development of more "gems" who are productive scholars, professors, and researchers in STEM, especially in the mathematical sciences.

Jacqueline Brannon-Giles is a member of the NAM Board, the region $C$ representative, and a member of the NAM MAA Blog Editorial Board. She can be reached at region-c-member@nam-math.org.

NATIONAL ASSOCIATION OF MATHEMATICIANS
P.O. Box 5766, Tallahassee, Florida 32314

# THE NAM GOLDEN ANNIVERSARY CAMPAIGN ENDS FOR ACCEPTING DONATIONS FROM MEMBERS <br> IN DECEMBER 2019 

The resulting GOLDEN ANNIVERSARY HONOR ROLL OF DONORS<br>will become a significant part of NAM's 50th Anniversary Celebration Archives

## Final Appeal

Please make your final donation by December 15 so that your Campaign support will be recognized on the Honor Roll

Questions? Contact a Campaign co-chair<br>Johnny L. Houston, PhD, Campaign Co-Chair Jlhouston602@gmail.com ;Tel.: 252-267-2222<br>Sylvia T. Bozeman, PhD, Campaign Co-Chair sylvia.bozeman12@att.net

Please provide your donation electronically at NAM's website or send by U. S. mail (P.O. Box).
www.nam-math.org president@nam-math.org

A 501(c)3 non-profit professional organization
Roselyn Williams, PhD, Secretary-Treasurer
P. O. Box 5766, Tallahassee, Florida 32314

# New from the AMS 

## Women Who Count

Honoring African American Women Mathematicians

Shelly M. Jones, Central Connecticut State University, New Britain, CT
Tessellations, palindromes, tangrams, oh my! Women Who Count: Honoring African American Women Mathematicians is a children's activity book highlighting the lives and work of 29 African American women mathematicians, including Dr. Christine Darden, Mary Jackson, Katherine Johnson, and Dorothy Vaughan from the awardwinning book and movie Hidden Figures. Although the book is geared toward children in grades $3-8$, it is appropriate for all ages.

The book includes portrait sketches and biographies for the featured mathematicians, each followed by elemen-tary-school and middle-school activity pages. Children will enjoy uncovering mathematicians' names in word searches, unscrambling math vocabulary words, solving equations to decode interesting facts, using logical thinking to uncover magic squares, locating hidden objects on an "I Spy" page, and more! They will also read about the important contributions of Drs. Martha Euphemia Lofton Haynes, Evelyn Boyd Granville, and Marjorie Lee Browne, the first three African American women to receive doctoral degrees in mathematics. Other women profiled include contemporary mathematicians who will inspire today's children to become tomorrow's leaders. Women Who Count is a must-read for parents and children alike!

2019; 143 pages; Softcover; ISBN: 978-1-4704-4889-9; List US\$15; AMS members US\$12; MAA members US\$13.50; Order code MBK/124

## BY SHELLY M. JONES, PH.D. ILLUSTRATED BY VERONCC MARTIWS

This is a great endeavor! I'm looking forward to meeting the kids inspired by the book!

I applaud the author's creativity! This activity book is a unique way to expose children early to mathematical ideas and to a part of American history that is not readily accessible at a young age.
—Dr. Sylvia T. Bozeman

Diversity of representative images of Black women in all facets of life is so important for all. Thank you to Shelly Jones for providing a platform to celebrate the contributions of Black women to mathematics.

# Announcing the Clarence Stephens Abdulalim Shabazz Teaching Award by Edray Herber Goins 

The Board of Directors of the National Association of Mathematicians (NAM) has established a prize in honor of Clarence Stephens and in honor of Abdulalim Shabazz to recognize outstanding mentorship activities.

Clarence Stephens (1917 - 2018) came to Morgan State University in 1947 as chair of the Department of Mathematics, but prior to his arrival, no student from Morgan had gone on to earn a masters degree in the mathematical sciences. Some of the undergraduates Stephens taught during this time who went on to earn a doctorate degree are Earl Barnes, Vassily Cateforis, Earl Embree, Gloria Ford Gilmer, Arthur Grainger, Charles Moore, Sylvester Reese, Robert Smith, and Scott Williams.


Abdulalim A. Shabazz \& Clarence F. Stephens
Abdulalim Shabazz (1927-2014), born Lonnie Cross, helped establish the reputations of several HBCUs as department chair, and mentored countless students across the country. Shabazz received a mentoring award from the American Association for the Advancement of Science (AAAS) in 1992 as well as a Presidential Award for Excellence in Science, Mathematics and Engineering Mentoring (PAESMEM) award from President Bill Clinton in 2000.

This prize will be awarded annually to a mathematics educator who has significantly contributed to the development of mathematical talent in underrepresented undergraduate students and encouraged underrepresented undergraduate students to
pursue mathematical careers and/or the study of mathematics at the graduate level, with preference given to faculty from Historically Black Colleges and Universities (HBCUs). The recipient will receive a $\$ 1,000$ cash prize and honorary plaque, and will be featured in an article in the NAM Newsletter. The award is open to all in the mathematical profession. Nominees must be living at the time of their nomination.

## HOW TO NOMINATE

Anyone interested in nominating an educator for this award should send any questions to stephens-shabazz-award@nam-math.org. More information about the award can be found on the NAM website, by following this link.

All nominees must meet the following requirements:

1. Must have worked or currently works in the classroom as a faculty at a college or university.
2. Must be a member of an underrepresented minority group (African Americans, Hispanics, and American Indian or Alaska Native) or someone from the African Diaspora.
All nominations must consist of the following in order to be considered complete:

- A 1-page cover letter from the nominator. This document should list contact information about the nominator, the nominee, and the individuals who will submit letters of recommendation.
- A 2-page Curriculum Vitae for the nominee. This must discuss the work of the nominee, not the nominator.
- A narrative, up to 3 pages, outlining the impact the nominee has had as both an educator and a mentor. This narrative should provide evidence of the nominee's sustained
track record in outstanding teaching as well as mentoring of underrepresented minority undergraduates in the mathematical sciences. The nominator should include a clear description of the nominee's philosophy with regard to teaching and mentoring. Please provide a description of how the nominee's previous student have progressed in their careers (such as participation in REUs, earning doctorate degrees, or becoming leaders in the STEM fields) or where the mentees are currently.
- Four letters of recommendation, each up to 2 pages. At least two of these four letters must address the nominee's teaching and at least two must address the impact of mentor-
ing. A least two of these four letters must come from former students, where one letter must address the nominee's teaching while the other must address the impact of mentoring.

Please submit these documents via e-mail to stephens-shabazz-award@nam-math.org. A due date for the 2020 award will be announced at a later date. The 2020 award will be presented at the Joint Mathematics Meetings on Friday, January 17, 2020.

Edray Herber Goins is the President of NAM. He can be reached at president@nam-math.org.

# Bridging the Cultural Divide to Lead the NIST DLMF Tables Project <br> by Bonita Saunders 

Most of the people in the Applied and Computational Mathematics Division (ACMD) at the National Institute of Standards and Technology (NIST) have a graduate degree, usually a PhD. Their research field might be in computational and applied mathematics, computer science, the physical sciences or an engineering field. One of my colleagues often jokes that leading an ACMD project team is a lot like "herding cats." Realizing this, I approach the management of a project as both the leader and a team member. The key is to get everyone motivated and excited about the project, find ways to utilize the expertise of each team member, and as much as possible, provide a relatively stress-free environment where we can all do our best work. Our ACMD division chief does not "run" the project on a daily basis, but through project reports and oral communication he is well aware of its merits and can discuss it intelligently with NIST upper management. This "bottom up" leadership style is typical of most ACMD projects.

However, my leadership of a new project inspired by the NIST Digital Library of Mathematical Functions (DLMF) (https://dlmf.nist.gov/) creates an extra challenge because part of my team is at NIST while the others are members of the Computational Mathematics Research Group (CMA) at the University of Antwerp in Belgium. The project is called DLMF Standard Reference Tables on Demand (DLMF Tables). The goal is to develop an online computational resource for generating validated tables of special function values with certified error information computed to user-specified precision. A typical user might be a researcher or software developer testing his own code or confirming the accuracy of results obtained from a commercial or publicly available package. The goal is to create a standalone system, but also link to and from the NIST DLMF. A beta site based on CMA's MpIeee, a multiprecision IEEE 754/854 compliant C++ floating point arithmetic library, is already available at
http://dlmftables.uantwerpen.be/
To keep the project on track, we communicate by email, meet by teleconference, or get together at conferences whenever possible. However, a five week visit at the University of Antwerp this past summer helped me understand why the regularity of our meetings often seemed to break down. Our work calendar year and many of our holidays are not in sync with theirs. That is also true for many meetings, conferences and other obligations that happen on either side throughout the year. Issues arising from other commitments can be lessened by faithfully using online tools to schedule our meetings, but I also made other observations while in Antwerp that I must keep in mind while leading the project. First, although projects in my division tend to have a bottom up structure, the structure of the Antwerp group is clearly "top down". This works well for them and making sure the head of the Antwerp group is kept informed is an easy solution. Second, as at NIST, Antwerp group members are expected to provide reports that show accomplishments at the end of the work year. Having a clearer
idea of the start and end dates for their work year would help me ensure there are significant project results for them to report.

Currently, a two-year postdoctoral research opportunity in validated computation of special functions is available at the National Institute of Standards and Technology in Gaithersburg, MD through the US National Research Council (NRC) Associateship Program. Applicants must be US citizens. The application deadline is February 1, 2020. Before formally applying, candidates should contact me at bonita.saunders@nist.gov to discuss this appointment. Also, please see the ad in this newsletter for additional information.

Bonita Saunders is a Research Mathematician in the Applied and Computational Mathematics Division at the National Institute of Standards and Technology. (NIST). She was recently elected as a fellow of the Washington Academy of Sciences in May 2019.. She can be reached at bonita.saunders@nist.gov.

## NAM Member Activities at 2019 Society for the Advancement of Chicanos and Native Americans in Science (SACNAS) Annual Meeting by Omayra Ortega

The 2019 Society for the Advancement of Chicanos and Native Americans in Science (SACNAS) annual meeting took place in beautiful Honolulu, Hawai'i, at the Hawai'i Convention Center. SACNAS's vision is, "Achieving true diversity in STEM. True diversity means that the field (including leadership positions) reflects the demographics of the population." Dr. Jamylle Carter, Dr. Michael Young, and Dr. Omayra Ortega, all NAM board members, attended the event and represented NAM.


Stephanie Byrd of the Spelman College RISE

Program on the beach making friends with the local fauna


SACNAS Presidents, past and present, photo credit: Dr. Fabio Milner


Dr. William Velez and Dr. Omayra Ortega in conversation at the SACNAS Friends of Society \& Life Members Breakfast, photo credit: Dr. Fabio Milner

Dr. Ortega co-facilitated the featured workshop, "Identifying and Managing Microagressions in the Academic Setting," with Dr. Kristin Pauker, a social psychologist from the University of Hawai'i Manoa. This incredibly well-attended and wellreceived workshop was sponsored by NAM and the

Joint Committee on Women in the Mathematical Sciences. Participants left with concrete tools for addressing microagressions when they occur in their academic lives. A similar workshop will be offered at the 2020 Joint Mathematics Meetings in Denver. Drs. Carter and Ortega closed out the event having dinner with Dr. Ranthony Edmonds, who presented in the NAM Recent PhD Session at the 2019 Joint Mathematics Meetings.


Drs. Carter, Ortega, and Edmonds (clockwise from the top.)

Omayra Ortega is an assistant professor at Sonoma State University and is the chair of the NAM Publications and Publicity Committee. She can be reached at editor@nam-math.org.


Participants in the 2019 SACNAS Microagressions Workshop, sponsored by the National Association on Mathematicians and the Joint Committee on Women in the Mathematical Sciences

## A Call for Letters to the Editor

## Envisioning the Next 50 Years of NAM

## This past year we celebrated NAM's Golden Anniversary.

The first 50 years of the National Association of Mathematicians were marked with special sessions at the Joint Mathematical Meetings in Baltimore, MD, the preparation of one of the first Proceedings for the organization, panels, presentations, and even a cake at the MAA MathFest. I would like to honor the founders who had the vision to create this organization by asking that YOU, the membership of NAM, send in letters to the editor envisioning the next 50 years of NAM.

- Where would you like to see NAM go in the next 50 years?
- What does NAM mean to you?
- What hopes and dreams do you have for NAM's programs, NAM's membership, and NAM's mission?

With gratitude,
Editor-in-Chief, Omayra Ortega
editor@nam-math.org

HNSF

## Hamiltonian Methods in Dispersive and Wave Evolution Equations <br> September 8 - December 10, 2021

Organizing Committee:

Diego Cordoba, ICMAT
Erwan Faou, INRIA Rennes
Patrick Gerard, Paris-Sud University
Pierre Germain, NYU Courant Institute

Alexandru lonescu, Princeton University
Alex Kiselev, Duke University
Andrea Nahmod, UMass Amherst
Kenji Nakanishi, Kyoto University

Benoit Pausader, Brown University
Themistoklis Sapsis, MIT
Gigliola Staffilani, MIT

## Program Description:



Dispersive equations are ubiquitous in nature. They govern the motion of waves in plasmas, ferromagnets, and elastic bodies, the propagation of light in optical fibers and of water in canals. They are relevant from the ocean scale down to atom condensates. There has been much recent progress in different directions, in particular in the exploration of the phase space of solutions of semilinear equations, advances towards a soliton resolution conjecture, the study of asymptotic stability of physical systems, the theoretical and numerical study of weak turbulence and transfer of energy in systems out of equilibrium, the introduction of tools from probability and the recent incorporation of computer assisted proofs. This semester aims to bring together these new developments and to explore their possible interconnection.
The main events will be centered around three workshops: one workshop on numerics, modeling and experiments in wave phenomena; one workshop on generic behavior of dispersive solutions and wave turbulence; one workshop on Hamiltonian methods and asymptotic dynamics.
One of the main objectives of this semester will be to integrate researchers from different horizons, and therefore special attention will be devoted to foster interdisciplinary interactions. There will be an additional introductory workshop at the beginning of the semester, and various events held in preparation of each workshop as well as in-depth follow-up discussions.

The Institute for Computational and Experimental Research in Mathematics (ICERM) at Brown University: To learn more about ICERM programs, organizers, program participants, to submit a proposal, or to submit an application, please visit our website: https://icerm.brown.edu

## BEAM

## Bridge to Enter Advanced Mathematics

## Summer Positions Available!

Bridge to Enter Advanced Mathematics is a free program for students from low-income and historically marginalized communities who show exceptional potential in mathematics.


All students and staff at Union College in Summer 2019
For Summer 2020, we are hiring...
...college professors and classroom teachers as faculty. Design your own courses on favorite math topics. Teach to small classes of motivated middle schoolers. ...graduate students as junior faculty, designing and teaching courses with structured support and mentorship. ...college students as student life counselors and teaching assistants.

Transportation, housing, and food provided for residential staff. Please see the website for more information about salary and other compensation.
"Teaching at [BEAM] was a great joy, and I highly recommend it as an outreach initiative to get involved in!"


Professor Mohamed Omar, Harvey Mudd College

For more information and how to apply:


## Job Openings

## Diablo Valley College - Math/Computer Science Division

The Contra Costa Community College District invites applications for a full time, tenure-track Mathematics Assistant Professor at the Diablo Valley College in the Math/Computer Science Division. In addition to contractual duties, all full-time faculty are expected to participate actively in their disciplines, department activities, and the general intellectual life and governance of the college. Part of the teaching assignment may be in the evening and/or online. Applicants must possess one of the following from an accredited college or university:

Master's degree in mathematics or applied mathematics OR Bachelor's degree in either of the above AND master's degree in statistics, physics, or mathematics education OR A valid California Community College Instructor Credential authorizing full-time instruction in Mathematics OR The equivalent.

The Contra Costa Community College District does not discriminate against any applicant for employment on the basis of race, religion, color, national origin, ancestry, physical or mental disability, medical condition, marital status, age, sex, or sexual orientation. This prohibition against unlawful discrimination extends to any person who is perceived to have any of the above characteristics or who is associated with someone who has, or who is perceived to have, any of those characteristics.To view the complete listing or to apply for the position, please visit: https://apptrkr.com/165529 Applications must be submitted no later than 11/26/2019.

## National Institute of Standards and Technology (NIST) - Postdoctoral Position in Validated Computation of Special Functions

A two-year postdoctoral research opportunity in validated computation of special functions is available at NIST in Gaithersburg, MD through the US National Research Council (NRC) Associateship Program. Applicants must be US citizens. The application deadline is February 1, 2020.

NIST's Applied and Computational Mathematics Division (ACMD) is developing an online system for generating validated tables of special function values with an error certification computed to user-specified precision. A typical user might be a researcher or software developer testing his own code or confirming the accuracy of results obtained from a commercial or publicly available package. The goal is to create a standalone system, but also link to and from the NIST Digital Library of Mathematical Functions (https://dlmf.nist.gov/). The project, DLMF Standard Reference Tables on Demand (DLMF Tables), is a collaborative effort with the University of Antwerp Computational Mathematics Research Group (CMA) led by Annie Cuyt. A beta site based on CMA's MpIeee , a multi-precision IEEE 754/854 compliant C++ floating point arithmetic library, is already available at http://dlmftables.uantwerpen.be/. The successful candidate can advance our current efforts in the field of validated computing through the continued research and development of multiple precision function software providing guaranteed error bounds at arbitrary precision. The associate will also help expand DLMF Tables into a full-fledged site, as well as investigate the enhancement of existing multiprecision libraries for possible inclusion in DLMF Tables.

Before formally applying, candidates should contact bonita.Saunders@nist.gov to discuss this appointment. For additional information on NIST ACMD postdoc opportunities see https://www.nist.gov/itl/math/postdoctoral-opportunities.

## University of Alabama - Department of Mathematics, Analysis

The Department of Mathematics at The University of Alabama invites applications for a tenure-track position at the Assistant Professor level in analysis. We are seeking a mathematician whose research lies in one or more of the areas of harmonic analysis, PDEs and geometric measure theory, with preference for someone who works in their overlap, and who will complement existing strengths in our current analysis group. The position will begin on August 16, 2020. For the complete description of the position, including expected qualifications and required application materials, and to apply, please see the ad and online application at https://facultyjobs.ua.edu/postings/45904. Applications will be reviewed on an ongoing basis starting November 1, and will continue to be accepted until the positions are filled.

## Santa Clara University - Department of Mathematics and Computer Science

The Department of Mathematics and Computer Science at Santa Clara University, a Jesuit Catholic institution, seeks to fill one Lecturer position in lower-division mathematics, commencing September 1, 2020. The position requires teaching seven lower-division mathematics courses, such as: Pre-calculus, Finite Mathematics, The Nature of Mathematics, Calculus I, II, III, IV (for Science and Engineering majors), Business Calculus I and II, Calculus for Life Sciences I and II, and Introduction to Statistics. Candidates must have a graduate degree, preferably a Ph.D., in Mathematics, Computer Science, or a closely related field, to be completed by September 1, 2020. Regardless of degree, candidates must provide evidence of excellence in teaching at the university or college level. Position available starting September 1, 2020.

The closing date for applications is December 31, 2019 at 3 pm Pacific time. Undergraduate teaching only. Santa Clara University, located in California's Silicon Valley, is a comprehensive, Jesuit, Catholic university, and an AA/EEO employer. For more information, see www.scu.edu/hr/careers/faculty.cfm.

Apply at:
https://wd1.myworkdaysite.com/en-US/recruiting/scu/scu/job/Santa-Clara-CA/Lecturer_R213

## Santa Clara University - Department of Mathematics and Computer Science

The Department of Mathematics and Computer Science at Santa Clara University invites applications for a three-year (renewable) Lecturer position in mathematics education to run and assess a relatively small Mathematics Learning Center and teach at least three lower-division undergraduate mathematics courses per year. We are interested in candidates with strong backgrounds in the best practices for mathematics pedagogy and assessment of student learning. The successful candidate will have strength in both mathematics and mathematics education. Candidates must have a graduate degree, preferably a Ph.D./Ed.D., in Mathematics, Education, or a closely related field, to be completed by September 1, 2020. Position available starting September 1, 2020. The closing date for applications is December 31, 2019 at 3pm Pacific Time. Santa Clara University, located in California's Silicon Valley, is a comprehensive, Jesuit, Catholic university, and an AA/EEO employer. For more information, see Www.scu.edu/hr/careers/faculty.cfm.

Apply at:
https://wd1.myworkdaysite.com/en-US/recruiting/scu/scu/job/Santa-Clara-CA/Lecturer_R221

## DePaul University - Department of Mathematical Sciences

The Department of Mathematical Sciences at DePaul University in Chicago invites applications for one tenure-track position in Analysis or Applied Mathematics to begin September 2020. We seek candidates with a demonstrated record of effectiveness as the instructor for a variety of courses or teaching environments, a demonstrated commitment to continued development as an educator, and active engagement in high-quality research in analysis or applied mathematics. Applicants must have a PhD in one of the mathematical sciences in-hand by December 2nd, 2019.

Completed applications must be uploaded to MathJobs.org by December 2nd, 2019. For more information, see https://www.mathjobs.org/jobs/DePaul.

## Greenfield Community College - Mathematics Department

Beginning at the start of the 2020-2021 academic year. GCC is a public community college serving 4,800 credit and non-credit students located in the beautiful and historic Pioneer Valley of western Massachusetts, between the foothills of the Berkshire Mountains and the fertile farmland of the Connecticut River watershed. Interested parties are encouraged to view the complete job posting which includes all duties and qualifications on our website: https://www.gcc.mass.edu/hr/apply/. Cover letters, resumes, and contact information for five professional references must be uploaded via our website in order to be considered. Review of applications will begin with those uploaded by December 20, 2019.

## California State University Channel Islands - Mathematics Department

The Mathematics Department at the California State University Channel Islands, a federally designated Hispanic Serving Institution, invites applications for a tenure-track position in Statistics or Applied Mathematics beginning Fall 2020. Ph.D. in Statistics or Applied Mathematics or closely related field is required. Excellence in teaching and research is essential. Additional requirements are evidence of ongoing research activities, excellence in teaching with a variety of methodologies, experience with modern software, and experience with and commitment to working in a multiethnic, multilingual, and multicultural environment. Review starts on December 9, 2019. For an on-line application and additional information go to: https://www.csucifacultyjobs.com/. CSUCI is an Equal Opportunity Employer committed to diversified workforce.

## California State University, Long Beach - Department of Mathematics and Statistics

The Department of Mathematics and Statistics at California State University, Long Beach (CSULB), warmly invites applicants for a tenure track position at the rank of Assistant Professor in Pure Mathematics beginning August 17, 2020. Salary will be commensurate with qualifications and experience. Review of applications begins on November 1, 2019, and will continue until the position is filled. The details of the position, including Preferred Qualifications and Duties, can be found at http://www.csulb.edu /academic-affairs/faculty-affairs/assistant-professor-of-pure-mathematics-2610

## Occidental College - Department of Computer Science

## Computer Science Postdoctoral Fellowship

Occidental College is searching for a full-time postdoctoral fellow in the area of Computational Media focusing on Virtual and Augmented Reality, Computer Graphics, Computational Geometry, or a related field. This is a fixed-term appointment based in Los Angeles, California. Read here for the full fellowship description: https://www.oxy.edu/sites/default/files/assets/HR/Faculty/computer_science _mellon_postdoctoral_fellow_jd_final-09-26-2019_0.pdf

## Case Western Reserve University - Department of Mathematics, Applied Mathematics, and Statistics

The Department of Mathematics, Applied Mathematics, and Statistics at Case Western Reserve University is searching for a tenure-track assistant professor in Statistics to begin in AY 2020/2021. Preference will be given to candidates whose research is in areas of statistics that complement and interface with the existing expertise in the department and who can meaningfully interact with the current group of statisticians, probabilists, and applied mathematicians in the department. This hire is part of an effort to continue building a statistics group that interfaces well with faculty in other fields, including, for example, biology, physics, astronomy, biostatistics, as well as researchers in the Schools of Engineering and Management.

All candidates should hold a Ph.D. in Statistics or a related field by the time of the appointment, have demonstrated teaching/mentoring experience, and a publication record appropriate to rank. Candidates should submit a letter of application, curriculum vitae, a statement of teaching philosophy and experience, evidence of teaching excellence, and a statement of current and future research plans. In addition, the candidate should arrange for three letters of recommendation to be submitted by writers directly to https:\www.mathjobs.org.

All application materials should be submitted electronically through the AMS website https:\www.mathjobs.org. Applications will be reviewed upon arrival. All applications received prior to December 15, 2019 will get full consideration.

More detailed information regarding the Department may be found on our website:
http://www.cwru.edu/artsci/math/. Applications will be reviewed upon arrival. Case Western Reserve University is located in the University Circle cultural district of Cleveland, Ohio, home of the nationally top-ranked Cleveland Clinic, internationally famous Cleveland Orchestra, the Cleveland Museum of Art, the Cleveland Institute of Music, and the Cleveland Institute of Art. Within a five-mile radius from CWRU are the nation's second largest theater district, several professional sports teams, a wide range of musical, artistic, and culinary venues, and numerous, diverse communities in which to live.

Items to be submitted with the application: AMS Cover Sheet Curriculum Vitae Publication List Research Statement Teaching Statement and Evaluations 3 Reference Letters (submitted directly by writers)

In employment, as in education, Case Western Reserve University is committed to Equal Opportunity and Diversity. Women, veterans, members of underrepresented minority groups, and individuals with disabilities are encouraged to apply. Case Western Reserve University provides reasonable accommodations to applicants with disabilities. Applicants requiring a reasonable accommodation for any part of the application and hiring process should contact the Office of Inclusion, Diversity and Equal Opportunity at $216-368-8877$ to request a reasonable accommodation. Determinations as to granting reasonable accommodations for any applicant will be made on a case-by-case basis.

## Harvey Mudd College - Department of Mathematics

Harvey Mudd College invites applications for a tenure-track position as an assistant professor in mathematics, beginning Fall 2020. All areas in the mathematical sciences will be considered, with priority for candidates who can contribute to data science and statistics at a liberal arts college of science and engineering. Demonstrated excellence in teaching undergraduates, a research program that can contribute to our many undergraduate research activities, and commitment to broadening participation in STEM for historically underrepresented groups are among the criteria for appointment. Priority will be given to applications completed by November 20, 2019. More information and application link at: https://www.mathjobs.org/jobs/jobs/14111.

## Air Force Academy - Department of Mathematical Sciences

The Department of Mathematical Sciences anticipates hiring one full-time Assistant Professor with an emphasis in statistics and data science, beginning July 2020. We want an individual who possesses or can develop the skills to assume a significant leadership role in our data science program. A doctoral degree in mathematics, applied mathematics, statistics, or data science is required.

The Air Force Academy is committed to building a culturally diverse educational environment. Applicants are requested to include information about how they will further this goal.

To Apply: Go to https://www.usajobs.gov/GetJob/ViewDetails/546028000 or
http://www.usajobs.gov and type in "USAF Academy" in the "Keywords" box and click on "Search." For questions, contact Dr. Mike Brilleslyper at mike.brilleslyper@usafa.edu. The only way to apply for this position is through the USA Jobs website.

Applications must be received by 15 November 2019. U. S. citizenship required. The Federal Government is an equal opportunity employer. The United States Air Force Academy values the benefits of diversity among the faculty to include a variety of educational backgrounds and professional and life experiences.

## University of Massachusetts Amherst - Department of Mathematics

Assistant Professor - Data Science \& Scientific Computing
The Department of Mathematics and Statistics at the University of Massachusetts, Amherst, invites applications for a full-time tenure track position in Data Science and/or Scientific Computing at the Assistant Professor level to begin in the fall semester of 2020.

Requirements:

- Present strong evidence of outstanding research accomplishments and promise in both research and teaching.
- Required to have a Ph.D. in Mathematics, Statistics or a related field/area of study by the time of appointment.

To apply, please visit: http://www.mathjobs.org/jobs
UMass Amherst in an equal opportunity employer.

## Brooklyn College of the City University of New York - Department of Mathematics

Brooklyn College of the City University of New York (CUNY) invites applications for a full-time tenure-track Assistant or Associate Professor position in the Department of Mathematics with a starting date in August 2020. The Mathematics Department of Brooklyn College offers BA and BS programs in Mathematics, a BA program in Adolescence Education - Mathematics Teacher, and BS programs in Actuarial and Financial Mathematics; co-sponsors with other Brooklyn College departments a BS program in Computational Mathematics and two MA programs in Mathematical Education; and participates in three PhD Programs (Mathematics, Physics, and Urban Education) at the CUNY Graduate Center, where faculty may apply for joint appointments. There are about 200 majors in the undergraduate programs, with many in Actuarial Math and Secondary Math Education.

The Department is comprised of 18 full-time faculty along with about 40 adjunct instructors, who teach more than 90 sections of math courses each semester, with up to 35 students in each section, ranging from service course such as College Algebra to Advanced Math Electives. About 30 sections of College Algebra and Precalculus are offered for each semester, which are prerequisites for many courses for science majors.

The department seeks a candidate to be responsible to:

- Teach introductory/Gateway mathematics classes.
- Improve teaching effectiveness and student success in College Algebra and Precalculus.
- Coordinate the teaching of College Algebra and Precalculus each semester, which includes: Teach one section of one of the two subjects; Mentor and train adjunct instructors and graduate students; Write or supervise the writing of homework, quizzes, and exams; Set and enforce grading standards across all sections; and Apply for grants to study and implement best practices in teaching students.
- Commitment to excellence in research (Mathematics or Math Education) and teaching is essential, and service to the department and the college.

Brooklyn College, a senior College of the City University of New York, features "a special commitment to educate immigrant and first-generation college students from the diverse communities that make up our city and state." The college ethos is strongly invested in the educational and eventual career success of a student population that encompasses a multiplicity of nationalities, ethnicities, religions, cultures and languages. We are committed to fostering a spirit of camaraderie and shared ideals across the entire spectrum of our varied constituency. By accessing a first-class and affordable college education in an inclusive and nurturing intellectual environment, our students acquire the skills, confidence, and global mindedness that allow them to compete and thrive in a rapidly changing, unpredictable marketplace of ideas that is increasingly mindless of borders and spans the gamut of cultures and vernaculars.

To this end the college seeks faculty who are eager to engage with the diversity of our student body and have a demonstrated commitment to inclusion and heterogeneity. We seek to recruit and retain faculty who reflect the diversity of our student body. Successful candidates will bring their unique creativity, sensitivity, insights and perspectives to a college community that welcomes innovation in scholarship and teaching. Together we will model the finest that a public urban liberal arts, sciences, and professional studies college can be for the present and future.

## QUALIFICATIONS

Minimum Qualifications

- Ph.D. in mathematics or mathematics education or equivalent from an accredited institution
- Experience in teaching service mathematics courses such as Algebra, Precalculus, and Calculus
- Demonstrated ability to achieve student success in courses such as Algebra, Precalculus, and Calculus
- Demonstrated commitments to diversity and inclusion
- Demonstrated commitments to collegiality and collaboration


## Preferred Qualifications

- Experience in mentoring, training, and/or managing mathematics instructors (e.g., graduate students or adjuncts)
- Successful history of grant awards in mathematics education
- Demonstrated commitment to success of students in mathematics
- Experience with online mathematics homework systems
- Ability to lead successful teams


## COMPENSATION

Salary commensurate with experience and credentials. All appointments are subject to financial availability. CUNY offers faculty a competitive compensation and benefits package covering health insurance, pension and retirement benefits, paid parental leave, and savings programs. We also provide mentoring and support for research, scholarship, and publication as part of our commitment to ongoing faculty professional development.

## HOW TO APPLY

There are two steps to the applications process. All applications must be submitted online via the CUNY on-line application system (CUNYFirst).

STEP ONE—Submit Application by visiting https://cuny.jobs/brooklyn-college/new-jobs/ Applicants should upload the following in .doc, .pdf, or .rtf format:

- An application letter indicating the Assistant or Associate Professor - Mathematics position, which should detail how their teaching, service and/or scholarship has supported the success of students from racial, ethnic, and gender backgrounds that are underrepresented in their academic fields; applicants who have not yet had the opportunity for such experience should note how their work will further CUNY's commitment to diversity.
- Current curriculum vitae
- Teaching statement
- Peer-reviewed publications in undergraduate mathematics research or education
- Grant applications to further undergraduate mathematics research or education
- Course syllabi and other materials for service mathematics courses written by applicant
- Student evaluations of teaching

STEP TWO - Go to https://websql.brooklyn.cuny.edu/hrref/
All applicants are required to have three confidential letters of recommendation submitted electronically by their recommenders by visiting the link above and entering the contact information for three (3) recommenders. The online system will automatically email your recommenders a request to submit a letter via the system. Full instructions will be provided. Emailed or hard copy applications will not be considered. CLOSING DATE: January 2, 2020. JOB SEARCH CATEGORY: CUNY Job Posting: Faculty. Job ID: 21263.

EQUAL EMPLOYMENT OPPORTUNITY: CUNY encourages people with disabilities, minorities, veterans and women to apply. At CUNY, Italian Americans are also included among our protected groups. Applicants and employees will not be discriminated against on the basis of any legally protected category, including sexual orientation or gender identity. EEO/AA/Vet/Disability Employer.

## Mills College - Department of Mathematics \& Computer Science

The Mathematics \& Computer Science Department at Mills College invites applications for an Assistant Professor position in Mathematics. The successful candidate will have evidence of exemplary teaching and scholarship and explicit interest in mentoring and teaching a diverse body of undergraduate students.

## Minimum Qualifications:

- Ph.D. in Math, Applied Math, Statistics or a closely related field in hand at time of appointment
- Potential for excellence in undergraduate teaching
- Research program that will be productive and include undergraduates

For More Details and Application Instructions: https://apptrkr.com/1613774.
Review of applications will begin on November 4.

## Beloit College - Department of Mathematics and Computer Science

The Beloit College Department of Mathematics and Computer Science seeks two excellent teachers and productive researchers to fill two tenure-track positions at the rank of Assistant or Associate Professor beginning with the 2020-2021 academic year. We seek candidates who can contribute to the department's commitment to increasing student interest and success in mathematics. One successful applicant will hold a Ph.D. in mathematics with interests in computer science subjects and be able to teach required courses in one of algebra, analysis, or topology, and teach Calculus I, Calculus II, and Linear Algebra. One successful applicant will hold a Ph.D. in mathematics with expertise in statistics and be able to teach required courses in one of algebra, analysis, or topology, and teach Calculus I, Calculus II, Linear Algebra, and Data Analytics. We welcome employees who are committed to and will actively contribute to our efforts to celebrate our cultural and intellectual richness and be resolute in advancing inclusion and equity. We encourage all interested individuals meeting the criteria of the described position to apply. Please see the full job posting at: https://www.beloit.edu/live/profiles/1860-tenure-track-mathematics-and-computer-science for more information and application instructions.

## University of Alabama - Department of Mathematics, Math Biology

The Department of Mathematics at The University of Alabama invites applications for a tenured position at the Professor level, in the area of mathematical biology, beginning on August 16, 2020 or as negotiated. The salary for this position will be competitive. We are seeking an applied mathematician who has outstanding records in interdisciplinary research areas at the interface of mathematics and biology. Specific areas of interest include, but are not limited to biophysics, biomechanics, ecology, neuroscience, physiology, drug discovery, system biology, and biological data analysis. For the complete description of the position, including expected qualifications and required application materials, and to apply, please see the ad and online application at http://facultyjobs.ua.edu/postings/45908. Applications will be reviewed on an ongoing basis starting November 30, and will continue to be accepted until the positions are filled.

## Florida Atlantic University - Department of Mathematical Sciences

In support of the University's growing Data Science Platform, the Department of Mathematical Sciences at Florida Atlantic University invites applications for a tenure-track position in Statistics at the rank of Assistant Professor starting in August 2020. Responsibilities for this position include teaching statistics courses at the undergraduate and graduate levels, conducting scholarly research, and participating in professional service activities. This position offers the candidate exciting opportunities to expand and shape the statistics curriculum as part of several data science initiatives taking place across the University. The Assistant Professor, Mathematical Sciences will be expected to teach effectively and direct research at both the undergraduate and graduate level, participate in interdisciplinary programs, and apply for external research funding. Review of applications will begin in mid-December, with full consideration given to all applications received by January 1, 2020. For additional information about the position, please contact the Chair of the Search Committee by email to mathsearch@fau.edu.

Institution Description: Florida Atlantic University is comprised of six campuses located in beautiful South Florida. The Department of Mathematical Sciences is housed at the largest campus in Boca Raton, a metropolitan area situated between West Palm Beach and Ft. Lauderdale, and 1.5 miles from the Atlantic Ocean. The Department of Mathematical Sciences at FAU offers a full range of undergraduate and graduate degree programs in mathematics. The department has more than forty full-time faculty members, approximately two-thirds in tenure-earning positions, and about fifty doctoral students. FAU is home to The Center for Cryptology and Information Security and The Center for Complex Systems and Brain Sciences. Both the Scripps Research Institute and the Max Planck institute have branches located near FAU's Jupiter campus.

## Minimum Qualification:

- Ph.D. from an accredited institution in Statistics, Mathematics, Data Science, or a closely-related field. - In addition to established departmental research areas of Statistics and Biostatistics (including, e.g., collaboration with the College of Medicine), full consideration will be given to strong candidates with research in emerging areas of Statistics and Data Science such as Algebraic Statistics, Topological Data Analysis, Statistical Machine Learning, and Bioinformatics.
- The ideal candidate will pursue research that complements and blends well with the current expertise in the department. Applicants with a demonstrated record of interdisciplinary research and an interest in data-driven applications are particularly encouraged to apply, as the ideal candidate will form collaborations across multiple departments.
- Postdoctoral experience, potential to secure external funding, and experience in course development. Experience working with, teaching or mentoring diverse groups is also desirable.

All applicants must apply electronically to the currently posted position Assistant Professor, Mathematical Sciences on the Office of Human Resources' job website (https://fau.edu/jobs) by completing the required online employment application and submitting the related documents. When completing the online application, please upload the following: a cover letter, curriculum vitae, statement of research interests, statement of teaching philosophy and copies of official transcripts scanned into an electronic format.

Applicants should arrange to have at least three letters of recommendation sent by email to mathsearch@fau.edu or by first class mail to: Chair of the Search Committee, Department of Mathematical Sciences, Florida Atlantic University, 777 Glades Rd., Boca Raton, FL 33431. It is recommended that at least one letter addresses the candidate's teaching experience. A background check will be required for
the candidate selected for this position. This position is subject to funding. For more information and to apply, visit www.fau.edu/jobs and go to Apply Now REQ07772.

Florida Atlantic University is an equal opportunity/affirmative action/equal access institution and all qualified applicants will receive consideration without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability status, protected veterans status or other protected status. Individuals with disabilities requiring accommodation, please call 561-297-3057. 711.

FAU is committed to the principles of engaged teaching, research and service. All persons aspiring to achieve excellence in the practice of these principles are encouraged to apply.

## California State University, Los Angeles - Department of Mathematics

The Department of Mathematics at California State University, Los Angeles is currently seeking an Associate/Full Professor of Mathematics (with tenure) to take on course coordination responsibilities. Applications are now being accepted at the link below, where the full position announcement can be found: https://www.mathjobs.org/jobs/jobs/14649
Please submit all application materials electronically at http://www.mathjobs.org/jobs/CSULB.
CSULB is an Equal Opportunity Employer.

## Events of Interest to NAM Members

A complete list of events containing these and more can be found online:

> https://www.nam-math.org/upcoming-activities.html

ify for the Pell Grant (or federal financial aid for students with disabilities); be a junior/ senior in college; and maintain a minimum cumulative GPA of 3.0 or higher. Please apply via our website at http://www.collegetocongress.org/


The Field of Dreams Conference (Nov 1517, 2019) introduces potential graduate students to graduate programs in the mathematical sciences at Alliance schools as well as professional opportunities in these fields. Scholars spend time with faculty mentors from the Alliance schools, get advice on graduate school applications, and attend seminars on graduate school preparation and expectations as well as career seminars. Learn more here.

AAAS Science \& Technology Policy Fellows bring their STEM expertise to Washington. You impact policy across a broad range of issues, in all three branches of government: Executive, Legislative and Judicial. How would you spend a year in Washington? Share your vision: Start your S\&T Policy Fellowships application today! Applications are due November 1.


2020 Claytor-Woodard Address Dr. Suzanne Weekes (Worcester Polytechnic Institute) will deliver the 2020 Claytor-Woodard Address at the Joint Mathematics Meetings. Her talk is titled, $A$ Numerical and Analytical Study of Dynamic Materials.


2020 Cox-Talbot Address Dr. Roselyn Williams (Florida A\&M University) will deliver the 2020 CoxTalbot address at the Joint Mathematics Meetings in Denver. Her talk is titled, Bridging the Gaps in Undergraduate Mathematics Education.

Mathematical Sciences Research Institute
Alfred P. Sloan FOUNDATION

MSRI-UP 2020: Branched Covers of Curves The MSRI Undergraduate Program (MSRI-UP) is a comprehensive summer program designed for undergraduate students who have completed two years of university-level mathematics courses and would like to conduct research in the mathematical sciences. The main objective of the MSRI-UP is to
identify talented students, especially those from underrepresented groups, who are interested in mathematics and make available to them meaningful research opportunities, the necessary skills and knowledge to participate in successful collaborations, and a community of academic peers and mentors who can advise, encourage and support them through a successful graduate program.

The theme of the 2020 MSRI-UP is "Branched Covers of Curves" and the research leader is Dr. Edray Goins, Professor of Mathematics at Pomona College. The research program will focus on Galois Theory of curves, i.e. the realization of certain finite groups as the symmetries of maps from one curve to another. Students will work on a variety of problems ranging from the explicit construction of covers for a given group to visualizing such covers as exotic surfaces which are self-intersections of the sphere and the torus. The research groups will focus on Belyi maps, Dessin d'Enfants, Origami, and Shabat polynomials; while working in a variety of areas such as Galois theory, monodromy groups, number theory, and Riemann surfaces.

Students must have completed at least one proof-based mathematics course before the summer. Students who have taken an abstract algebra course will find it useful, though this is not required to be admitted to the program.

For additional information, please contact Duane Cooper at dcooper@morehouse.edu and go to their website https://www.msri.org/web/msri/ education/for-undergraduates/msri-up.


The 2020 Faculty Conference on Research and Teaching Excellence (FCRTE) will be held at Hampton University in Hampton Virginia (region B) in the spring of 2020 . The conference consists of five components: A Short Course in Computational Science, The Albert Turner Bharucha-Reid Lecture, Recognition Banquet, Contributed Talks, and a Regional Panel Discussion. More information can be found at the web site https://www.nam-math.org/fcrte.html.

## NAM Board of Directors

## President

Dr. Edray Herber Goins
Pomona College
president@nam-math.org
Vice President
Dr. Naiomi Cameron
Lewis \& Clark College
vice-president@nam-math.org
Secretary/Treasurer
Dr. Roselyn E. Williams
Florida A\&M University
secretary-treasurer@nam-math.org
Executive Director
Dr. Leona Harris
University of the District of Columbia
executive-director@nam-math.org
Region A Member
Dr. Chinenye O. Ofodile
Albany State University
region-a-member@nam-math.org
Region B Member
Dr. Shea Burns
North Carolina A\&T State University
region-b-member@nam-math.org
Region C Member
Dr. Jacqueline Brannon Giles
HCCS / Texas Southern University
region-c-member@nam-math.org

Majority Institution Member
Dr. Michael Young
Iowa State University
majority-institution-member@nam-math.org
Outside of Academia Member
Dr. Carla Cotwright-Williams
Department of Defense
outside-academia-member@nam-math.org
Community College Member
Dr. Jamylle Laurice Carter
Diablo Valley College
community-member@nam-math.org
Editor
Dr. Omayra Ortega
Sonoma State University
editor@nam-math.org
Ex-Officio President Emeritus
Dr. Nathaniel Dean
Texas State University San Marcos
ND17@txstate.edu
Executive Secretary Emeritus
Dr. Johnny L. Houston
Elizabeth City College
jlhouston602@gmail.com

## Region A

Southeast/West
Alabama
Georgia
South Carolina
Florida
Virgin Islands
Puerto Rico
California
Montana
Any state not in B or C

Region B
Mid-Atlantic
Delaware
District of Columbia
Kentucky
Maryland
New Jersey
New York
North Carolina
Pennsylvania
Virginia
West Virginia

Region C
Midwest/Southwest
Arkansas
Louisiana
Missouri
Oklahoma
Illinois
Ohio
Mississippi
Tennessee
Texas


## NATIONAL ASSOCIATION OF MATHEMATICIANS MEMBERSHIP AND DONATION FORM

MEMBERSHIP CALENDAR YEAR: JANUARY 1, 2019 to DECEMBER 31, 2019
This form can also be completed online at https://www.nam-math.org/authenticate/register/

TITLE $\qquad$ NAME $\qquad$
ADDRESS $\qquad$
INSTITUTION/EMPLOYER $\qquad$ TELEPHONE: HOME (__) $\qquad$ OFFICE (__)
FAX: (_) $\qquad$ E-MAIL ADDRESS $\qquad$

SELECT APPROPRIATE MEMBERSHIP TYPE
[ ] STUDENT: $\$ 30$ [ ] INDIV'L: $\$ 50$ [ ] LIFE: $\$ 500$ [ ] GOLDEN LIFE: $\$ 1,000$ [ ] INST'L: $\$ 150$
GENERAL DONATION \$ $\qquad$
GOLDEN ANNIVERSARY CAMPAIGN DONATION \$ $\qquad$

## PLEASE RETURN COMPLETED FORM AND MEMBERSHIP DUES TO:

Dr. Roselyn E. Williams, Secretary-Treasurer

National Association of Mathematicians P.O. Box 5766

Tallahassee, FL 32314-5766

Office Phone: (850) 412-5236
E-Mail: secretary-treasurer@nam-math.org
Web: http://www.nam-math.org

## INDIVIDUALS AND STUDENTS

Please complete below if you did not send NAM this information within the past three years. List all degrees you currently hold. Circle the correct degree.
B.S. or B.A.: Area $\qquad$ Institution $\qquad$
M.S. or M.A.: Area Institution $\qquad$
Ph.D. or Ed.D.: Area $\qquad$ Institution $\qquad$ Other: Area $\qquad$
[ ] Institutional Representative (for NAM)
[ ] Area or State Representative $\qquad$
[ ] Committee Member (specify interest): Interest $\qquad$
] Need additional information about the organizational structure of NAM
RACE/ETHNICITY (Optional):
[ ] Asian [ ] Black [ ] Hispanic [ ] Native American [ ] Pacific Islander [ ] White [ ] Other

## DONOR CARD <br> NAM GOLDEN ANNIVERSARY CAMPAIGN

## My gift to the NAM Golden Anniversary Endowment Campaign.

## Campaign Giving Levels

Platinum: \$5,000 and up Patron: \$150-\$499
Gold: \$2,500 -\$4,999 Sponsor: \$50-\$149
Silver: \$1,000-\$2,499 Donor: less than \$50
Bronze: \$500-\$999

My gift amount is \$ $\qquad$

With my gift above, I desire NAM Life

## Membership:

__ Golden Life Membership (\$1,000+)
$\qquad$ Regular Life Membership (\$500)
All gifts above will be identified by giving levels, rather than by individual amounts, in campaign reports.
[ ] I want my gift to remain anonymous.
[ ] My donation is for a special designation.
Designation:

Please credit my gift as an endowment of a NAM program (See right column for amounts. \$25,000 minimum)
$\qquad$ I am enclosing my gift (by mail)
I will pay on the NAM website
(Go to www.nam-math.org)

Make check payable to NAM G. A. Campaign and mail check to:

Dr. Roselyn E. Williams, Secretary-Treasurer, P.O. Box 5766, Tallahassee, Florida 32314

NAM is a $501(c)(3)$ non-profit organization.
All gifts are tax deductible

Name $\qquad$
Address $\qquad$
Institution/Employer $\qquad$
Phone $\qquad$
E-mail $\qquad$
__ I am making a pledge to be paid by September 30, 2019.

PLEDGE amount \$ $\qquad$

## ENDOWMENT OF AN ANNUAL NAM PROGRAM OR ACTIVITY

(Full endowment amounts listed. For more information contact jlhouston602@gmail.com)

| Undergraduate MATHfest | $\$ 500,000$ |
| :--- | :--- |
| Computational Science Institute | $\$ 250,000$ |
| Faculty Teaching \& Research | $\$ 250,000$ |


| Haynes-Granville-Browne Colloquium |  |
| :--- | :---: |
| Presentations by New PhDs | $\$ 125,000$ |
| Claytor-Woodard Lecture | $\$ 125,000$ |
| Cox-Talbot Address | $\$ 125,000$ |
| J. Ernest Wilkins Lecture | $\$ 125,000$ |
| Albert T. Bharucha-Reid Lecture | $\$ 125,000$ |
| David Blackwell Lecture | $\$ 125,000$ |
| Clarence Stephens-Abdulalim Shabazz |  |
| Teaching Award | $\$ 125,000$ |
| Archives | $\$ 125,000$ |

Note: For student, regular individual and institutional NAM memberships, go to www.nam-math.org.


## NAM Newsletter

c/o Dr. Omayra Ortega, Editor
National Association of Mathematicians
P.O. Box 5766

Tallahassee, Florida 32314-5766

Address Service Requested

Golden Anniversary 2019


Founded 1969

