



Upcoming
Events

UIUC DS4A/

Empowerment

Application
Deadline

Sept. 25, 2020

MAA Project
NExT

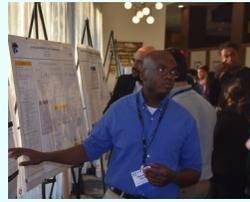
Application
Deadline

Oct. 15, 2020

2020 Field of
Dreams
Conference

Nov. 6-8, 2020

Fall Events Calendar



October 7th

October 17th

October 24th

November 6th & 7th - Virtual Field of Dreams Event

Math Alliance Statistics Initiative Gathering

Taking Our Place in Graduate School

Virtual Graduate Fair and Virtual REU Fair



Math Alliance Statistics Initiative Gathering (October 7, 3-4PM EDT for faculty): The Math Alliance has, since its inception, had a strong presence from and interest in promoting the statistical sciences community. This meeting will bring together our community of faculty and other professionals who are interested in learning more about the Math Alliance. We will provide guidance and best practices on effective mentoring of Math Alliance Scholars. We will also discuss how the Math Alliance can help your students and department, and provide details of upcoming events, including how to recruit during the Virtual Graduate Fair on October 24.

Taking Our Place in Graduate School (October 17, time TBA, for everyone): This will be a series of conversations focused on helping students prepare for, apply to, select, and thrive in a graduate program. This will include several breakout sessions in which students will meet with faculty from graduate programs to discuss important topics in small groups. There will also be current graduate students in attendance to provide their experience and perspectives. There will be a session on how to get the most out of the Graduate Fair which will occur the following week.

Virtual Graduate Fair and REU Fair (October 24, time TBA, for everyone): Our annual Graduate and REU fairs will take place on the virtual office platform [Sococo](#). Graduate programs will host rooms where they can meet students and there will be designated social areas for students and mentors to meet with each other. Similarly, REU programs and students will be able to connect through the REU Fair event. We are excited by the possibilities this platform presents to facilitate connections.

Virtual Field of Dreams event (November 6&7, times TBA, for everyone): This free event takes place on the planned dates of our annual Field of Dreams conference. There will be about 3 hours of programming on each day, and we will attempt to transfer some of the sessions planned for this year's conference to a virtual setting. We had great success working with IMA this summer to move our [Career Paths](#) workshop online, and we think we can leverage advantages of the virtual environment, while minimizing some of the things will lose by not being in the same place. Registration information will be coming soon. Registration and student nomination information will be available soon!

Thoughts from the Director...



David Goldberg

Executive Director
of the Math Alliance

There is so much going on and I am so impressed with how so many of our colleagues are continuing to keep themselves and their students engaged. Our F-GAP program has almost as many students as last year, and given the circumstances we think that is really good news.

We are looking forward to our [series of events](#) through October and November, and we recently released the dates and descriptions of these events. (This also appears on the first page of this newsletter as well as being sent to the Math Alliance Community by e-mail). On October 7, we will have a gathering of the Math Alliance Statistics Initiative, and we hope this will give our Statistical Sciences mentoring community a chance to connect with each other, and also help introduce new statistics folks to the Math Alliance. There will then be two weekend events – “Taking Our Place in Graduate School”, a workshop for Math Alliance Scholars on preparing for graduate school on October 17, and our Virtual Graduate Fair and Virtual REU Fair on October 24. These events all lead up to our Virtual Field of Dreams Event, November 6 & 7. We are sending out more details about these events, including how to register and participate, and we hope to see you all at these events. Mentors, we encourage you to attend these events along with your Scholars, to help them get the most out of the sessions.

Of course, this isn't happening in a vacuum. There is an election, continuing frustration and focus on systemic racism, and, oh yes, there is still a pandemic which is making teaching and learning a challenge. While all this and more are placing so much pressure on all of us, especially our Math Alliance Scholars, we are determined to keep our community intact and growing, and our students thriving. The series of fall events will bring us all together, to the extent we can, and help us achieve many of the goals of our usual Field of Dreams Conference. I look forward to seeing our community gather virtually, and reaffirm our commitment to each other and our work.

Celebrating Hispanic Heritage month with Lathisms

Lathisms (Latinx and Hispanics in the Mathematical Sciences) was founded in 2016 with the mission of showcasing the contributions of Latinx and Hispanic mathematicians during Hispanic Heritage Month United States from September 15 and October 15.

Honorees that are Past Math Alliance Scholars:

- Lynette Guzman

Honorees that are current Math Alliance Mentors:

- Mario Banuelos
- Alexander Barrios: *was a predoctoral scholar.*
- Javier Alejandro Chávez-Dominguez
- Tim Chumley
- Maytee Cruz Aponte: *was a predoctoral scholar.*
- Alexander Diaz-Lopez: *was a predoctoral scholar.*
- Claudia Falcon
- Ralph Gomez
- Ryan Moruzzi Jr.: *was a doctoral scholar.*

To see the full calendar of honorees, see their [website](#).

AMS Task Force on Racial Discrimination

The *AMS Task Force on Understanding and Documenting the Historical Role of AMS in Racial Discrimination* was established to listen to the mathematics community, especially from African-American mathematicians, about their experiences with racial discrimination in mathematics.

We have interviewed a cross-section of mathematicians already, but now we are seeking broader input from the community. Based on what we learn, we will be recommending actions to the AMS Council for actions they can undertake to rectify systemic inequities in the mathematics community, and within AMS in particular.

We have developed the following [questionnaire](#), which asks about your experiences and perspectives on racism in mathematics. The questionnaire asks you to provide only as much information as you feel comfortable sharing. Your input will be taken seriously by the Task Force, and the themes that emerge will be used in our report to the Council. All identifying information will be removed, and our findings will be presented only in aggregate. We understand this is an investment of your valuable time, but we feel this is an important opportunity to educate leadership of the mathematics community around issues that affect mathematicians of color, so we greatly appreciate any feedback you can give.

Please also share this letter and questionnaire with your department and other mathematicians as you feel appropriate, especially mathematicians of color. We are hoping to gather responses by October 15.

AMS Upcoming Elections

Math Alliance Community Members on the AMS Ballot:

Rodrigo Bañuelos, Vice President

Duane Cooper, Council Member at Large

Kiran Kedlaya, Council Member at Large

Victor Moll, Council Member at Large

Mark Tomforde, Council Member at Large

Ron Buckmire, Nominating Committee

David Savitt, Nominating Committee

Barbara Lee Keyfitz, Editorial Board Committee

Officers and committees of the AMS have a chance to influence policies at the Society, which makes these elections very important for our profession. While there are many things to consider when casting your vote, we hope you'll weight the fact that these individuals, through their participation as Math Alliance Mentors, have made a commitment to working for change within the mathematical professional community. We need such voices represented in this governance structure.

Please be sure to vote, and please consider voting for our Math Alliance Mentor candidates!!

Some Covid-19 Resources

- [AMS Resources & Updates related to COVID-19](#)
- [Free AMS Mathematical Modeling Books and Journals available during COVID-19 pandemic](#)

From ASA Blogs

- [SAS COVID-19 Free Books](#)
- [How can I help during coronavirus crisis](#)
- [COVID-19 Kaggle Competition Announced](#)

Still Accepting 2020-21 F-GAP Nominations!

The Facilitated Graduate Applications Process (F-GAP) is an Alliance program that provides undergraduate Juniors and Master's students with the advice and assistance needed to begin the application process as they apply to graduate programs.



F-GAP will help students choose departments that are most appropriate to their goals and aspirations. The Alliance Community will work with the student as they prepare their applications to graduate programs and will assist in tracking the progress of their applications through the admissions process. The Alliance Community will assist in maximizing the chances that Alliance Scholars will be admitted, with support, to a department or program where they will thrive. We will pair each eligible student with one of our Doctoral Alliance Mentors who will work with the students local mentor to create a mentoring team that will aid in the application process.

If you know of a student who will be applying to graduate programs for Fall 2021 please submit student nominations here: <https://mathalliance.org/2020-fgap-nomination-form/>. As part of this submission, you will be asked to check a box stating that you have read the document, [“Selecting students for the F-GAP program: FAQs.”](#))



Prof. Leslie McClure Wins Award



Prof. Leslie McClure, Chair of the Math Alliance Executive Council and a Math Alliance Mentor, has received the Janet L. Norwood Award for Outstanding Achievement by a Woman in Statistical Sciences. McClure will present a lecture on Tuesday, October 20, 2020 and receive an honorarium. Due to COVID-19 the lecture will be held via Zoom.

To read more about the award, see this link:

<https://www.uab.edu/soph/home/news-events/news/leslie-ain-mcclure-receives-janet-l-norwood-award-for-outstanding-achievement-by-a-woman-in-statistical-sciences>

Congratulations to Leslie for winning this award!

List of Graduate School GRE Requirements

We have added an updated list of schools with their updated GRE requirements to our webpage. Here is the [link](#) to find that information.

The information was compiled and provided by James Guillochon.

2020 MPS Workshop for New Investigators

Broadening Participation: 2020 MPS Workshop for New Investigators: Nov. 9-10, 2020

Registration Deadline: October 2nd

DMS is delighted to co-sponsor a workshop for new and future Principal Investigators. New researchers, assistant professors, and exceptional postdocs considering academic careers are encouraged to apply. Investigators from underrepresented groups in STEM are especially encouraged to apply. Due to the current COVID-19 situation, this workshop will be held via teleconference on November 9 and 10, 2020.

One of the main goals of the workshop is to provide prospective Principal Investigators who have just received their first award or who are considering applying for funding from the MPS/DMS programs with valuable information and advice on the policies, procedures, and opportunities available at NSF. Participants will also meet other PIs from across the other divisions in MPS.

In addition to informational presentations on various topics relevant to future PI's, all attendees will participate in full mock panel review processes to help them better understand the peer review process at NSF.

Registration website: <http://reg.conferences.dce.ufl.edu/Physics>

2021 SIAM PRIZES – ACCEPTING NOMINATIONS!

We are accepting nominations for the SIAM prizes that will be awarded in 2021. Tell us about a colleague who should be honored for their recent contributions to advances in applied mathematics and computational sciences. If you know someone who meets the criteria for one of the SIAM prizes below and deserves to be recognized for their achievements, **nominate them by OCTOBER 15, 2020.**

[Submit Your Nomination](#)

We particularly encourage nominations that reflect the increasing diversity of our profession. We rely on our community to keep us informed about recent contributions, and selection committees require at least three nominations to award a given prize. Your nomination counts!

2021 SIAM Prizes Now Accepting Nominations:

[Germund Dahlquist Prize](#)

[Ralph E. Kleinman Prize](#)

[George Pólya Prize in Applied Combinatorics](#)

[George Pólya Prize for Mathematical Exposition](#)

[W. T. and Idalia Reid Prize](#)

[George B. Dantzig Prize](#)

[Lagrange Prize in Continuous Optimization](#)

SIAM awards more than 50 prizes. Learn more about our prize program and [view all prizes with open calls](#). Contact prizeadmin@siam.org with questions regarding nomination procedure.



Prize Program

3600 Market Street - 6th Floor

Philadelphia, PA 19104

prizeadmin@siam.org / www.siam.org/Prizes-Recognition

SISG Scholarships Available

The Summer Institute in Statistical Genetics (SISG) has received NSF funding for scholarships for US graduate students. The goal of SISG is to strengthen the statistical and genetic proficiency and career preparation of scholars from all backgrounds, especially those from groups historically underrepresented in STEM such as racial and ethnic minority groups, low income, first generation college students, veterans, and differently abled and 2SLGBTQ groups. For 2021 the scholarships will provide registration, travel, housing and meal costs. With the need to be online only in 2020, scholarships will be for registration.

Scholarship applications and details of the 18 modules in SISG are at www.biostat.washington.edu/suminst/sisg. Applicants can choose from basic statistics and genetics courses; population, quantitative and forensic genetics; GWAS and network analysis; Bayesian and compositional data analysis, and several others. Each module will have pre-recorded lecture and interactive Zoom sessions, along with downloadable data and software.

Please send enquiries to sisg@uw.edu.

MSRI Upcoming Programs

MSRI invites applications for Research Professors, Research Members and Postdoctoral Fellows in the following programs:

Universality and Integrability in Random Matrix Theory and Interacting Particle Systems (August 16 - December 17, 2021)

The Analysis and Geometry of Random Spaces (January 18 - May 27, 2022)

Complex Dynamics: from special families to natural generalizations in one and several variables (January 18 - May 27, 2022)

Research Professorships are intended for senior researchers who will be making key contributions to a program, including the mentoring of postdoctoral fellows, and who will be in residence for three or more months. Research Memberships are intended for researchers who will be making contributions to a program and who will be in residence for one or more months. Postdoctoral Fellowships are intended for recent PhDs.

MSRI has been supported from its origins by the National Science Foundation, now joined by the National Security Agency, over 100 Academic Sponsor departments, by a range of private foundations, and by generous and farsighted individuals.

PRESS RELEASE

Updated "MAD Pages" Website to be Unveiled October 9

On October 9, 2020, there will be an unveiling of the updated website "Mathematicians of the African Diaspora," a site first created by Scott Williams (SUNY Buffalo) in 1997. The new site is <http://www.mathad.com>. This is the culmination of the 10-year project undertaken by Edray Goins (Pomona College), Don King (Northeastern University), Asamoah Nkwanta (Morgan State), and John Weaver (Varsity Software).

SEPTEMBER 28, 2020, CLAREMONT, CA {In 1997, Scott Williams (SUNY Buffalo) founded the website "Mathematicians of the African Diaspora," which has since become widely known as the MAD Pages. According to a 2019 blog written by Scott Williams for the American Mathematical Society, "As a child I was struck by the emphasis, within the general American culture, upon achievements in the Sports/Entertainment Industry as indications of success. Within the African American subculture, those indications are even stronger {just consider the winners of the NAACP Image Awards among other celebrations. On the rare occasion a scientist has won an award, there has been a limitation to the medical field. In addition, where it concerns successes in mathematics and the sciences, I discovered much incorrect or misconstrued information available in texts and especially on the web."

Williams built the site over the course of 11 years, creating over 1,000 pages by himself as a personal labor of love. The site features more than 700 African Americans in mathematics, computer science, and physics as a way to showcase the intellectual prowess of those from the Diaspora. Williams provided profiles of these individuals, detailing their education, their journey within mathematics thus far, and their accomplishments. He also created numerous pages discussing Black history within the mathematical sciences, and presented data on the demographics of Black people in the mathematical sciences at the time. Since its creation, the MAD Pages have received more than 20 million visitors, and provided immeasurable inspiration and validation to many Black mathematicians and students.

Scott Williams retired in 2008. After an initial town hall meeting about the future of the MAD Pages, which took place at a Conference for African American Researchers in the Mathematical Sciences (CAARMS), an informal group of mathematicians decided to work together to preserve Williams' work. In 2015, the National Association of Mathematicians (NAM) formed an ad hoc committee to update the MAD Pages, consisting of NAM President Edray Goins (Pomona College), Committee Co-Chairs Don King (Northeastern University) and Asamoah Nkwanta (Morgan State University), and web developer John Weaver (Varsity Software). The MAD Pages Update Project was funded in part by Temple University, the Educational Advancement Foundation (especially Albert Lewis and Harry Lucas), the Mathematical Sciences Research Institute (MSRI), the National Science Foundation (DMS-1560394), Northeastern University, Pomona College, and Washington & Lee University. We employed nearly four dozen undergraduate students from across the country to assist with this project; they greatly contributed to the database's depth and accuracy.

The updated MAD Pages will be unveiled to the public on October 9, 2020. This unveiling date intentionally coincides with the death of Benjamin Banneker, arguably the first African American mathematician," states committee member Edray Goins. "His collected works were lost in a mysterious fire which occurred on the day of his funeral. The MAD Pages is dedicated to the quest of preserving the memory of African American mathematicians, lest they be lost forever." The new pages consist of a database containing biographical information of more than 700 mathematical scientists from the diaspora. This site employs a wiki model, allowing users to create their own profiles and update any incorrect information. The new site can be found at <http://www.mathad.com>.

Name of Press Contact: Edray Goins

Phone: (909) 621-8711

Email: Edray.Goins@pomona.edu

Data Science For All / Empowerment Program

Society for the Advancement of Hispanics, Chicanos and Native Americans in Science (SACNAS)
Student Chapter at the University of Illinois at Urbana-Champaign

Email: sacnas.uiuc@gmail.com Web: <http://publish.illinois.edu/sacnasuiuc/>

Facebook: <http://www.facebook.com/groups/425287234189847>

Data Science For All / Empowerment is an online program that offers the world's best data analytics training to talented participants from Black, Hispanic, LGBTQ+, and other underrepresented communities.

Data skills are an increasingly important function of every type of job, not just technical ones. Employers are requiring these skills for roles like finance, sales, marketing, and product, among others, as well. Our program teaches the data skills that professionals across all industries and positions need.

The program is taught by world-class instructors from Harvard and connects participants to an amazing peer network and mentors.

DS4A / Empowerment is 100% free for participants, because we want the best talent to participate. The program is funded by corporate sponsors, who target graduates for job opportunities. Past participants of our programs have graduated to work at partner companies like Google, Lyft, Deloitte, JP Morgan, Twitch, Citadel, Memorial Sloan Kettering, and Johnson & Johnson.

correlation-one

EMPOWERMENT

DATA IS POWER. BOOST YOUR DATA SKILLS.

INSTRUCTORS FROM HARVARD UNIVERSITY
LEARN FOR FREE. BUILD YOUR NETWORK.
ACCESS TOP JOBS.

APPLY NOW! APPLY BY SEPTEMBER 25

WHAT IS THE PROGRAM?
DS4A / Empowerment is a free, world-class data skills training and jobs program for under-represented candidates.

Held on Saturdays, starting Oct 24, for 3 months, virtually

HOW TO GET IN?
Open to students and working professionals. College degree & STEM knowledge preferred, but not required. Beginners and advanced will both benefit. Admission is competitive and merit-based.

ABOUT CORRELATION ONE
Correlation One is the market leader in data & analytics training globally.

PAST PARTNERS INCLUDE

APPLY BEFORE SEP 25

IBM GEORGIA INSTITUTE OF TECHNOLOGY Dell LinkedIn IBM TWO SIGMA

APPLY NOW!



MAA Project NExT

NEW EXPERIENCES IN TEACHING

Launch the NExT stage of your career

The first round of applications for the 2021 cohort of MAA Project NExT has a deadline of **October 15, 2020**. Applications can be found at projectnext.maa.org. New(ish) faculty who are already in full-time teaching positions are strongly encouraged to use this deadline. Decisions will be made by December 1, 2020. Those accepting positions during this academic year (to start Fall 2021) may use the second application deadline of **April 15, 2021**.

MAA Project NExT (New Experiences in Teaching) is a year-long professional development program for new or recent PhDs in the mathematical sciences. The program is designed to connect new faculty with expert teachers and leaders in the mathematics community and address the three main aspects of an academic career: teaching, research, and service. Sessions will be held virtually if necessary.

Recent program sessions have included:

- getting your research and grant-writing off to a good start,
- innovative teaching and assessment methods and why they work,
- finding your niche in the profession,
- attracting and retaining underrepresented students,
- balancing teaching, research, and service demands,
- starting an undergraduate research program, and
- preparing for tenure.

MAA Project NExT Fellows join an active community of faculty who have become award-winning teachers, innovators on their campuses, active members of the MAA, and leaders in the profession.

MAA Project NExT welcomes applications from new and recent PhDs in postdoctoral, tenure-track, and visiting positions. We particularly encourage applicants from underrepresented groups, including women and minorities. Applications can be found at projectnext.maa.org.

Project NExTers (Silver '19) at MAA MathFest in Cincinnati.



Application deadline: October 15, 2020
projectnext.maa.org • projectnext@maa.org

2021-2022 MEMBERSHIP

IAS

INSTITUTE FOR
ADVANCED STUDY

PROGRAMS

WOMEN & MATHEMATICS

math.ias.edu/wam/2021

SUMMER COLLABORATORS

math.ias.edu/summercollaborators

MEMBERSHIPS

The IAS School of Mathematics welcomes applications from mathematicians and theoretical computer scientists at all career levels, and strongly encourages applications from women, minorities, and mid-career scientists (5-15 years from Ph.D.). Competitive salaries, on-campus housing, and other resources are available for periods of 4-11 months for researchers in all mathematical subject areas. The School supports approximately 40 post-docs per year. In 2021-2022, there will be a special-year program, **h-Principle and Flexibility in Geometry and PDEs**, led by Camillo De Lellis and László Székelyhidi, Jr., Distinguished Visiting Professor; however, Membership will not be limited to mathematicians in this field.

**To apply, submit your application
at mathjobs.org by December 1, 2020.**

For more information, please visit: math.ias.edu

2020 Paul J. Sally, Jr. Midwest Representation Theory Conference

The 2020 Paul J. Sally, Jr. Midwest Representation Theory Conference will be held **October 16 (Friday)–18 (Sunday), 2020**. This virtual conference, which is the 44th Midwest Representation Theory Conference, will focus on recent progress in the theory of representations of groups over local fields as well as connections of this theory to other areas within mathematics, notably number theory and geometry. The conference will feature a sequence of contributed talks, and we encourage you both to apply to give such a talk and to advertise this opportunity to graduate students and colleagues. Please see the conference page at <http://homepage.divms.uiowa.edu/~mkrishna/2020mrtc/>.

Registration is available at <https://forms.gle/zFAnQBnuPGRnKzMr7> until **October 14**.

Applications for contributed talks can be made at <https://forms.gle/VgRq8m826T1SSmwk7>. We especially encourage early-career participants from the broader Midwest region to apply. Applications will be reviewed on a rolling basis beginning September 7, so please apply in a timely fashion.

We conform with the AMS Policy on a Welcoming Environment (<https://www.ams.org/about-us/governance/policy-statements/welcoming-environment-policy>). In particular, “We strive to ensure that participants enjoy a welcoming environment and seek to foster an atmosphere that encourages the free expression and exchange of ideas. We support equality of opportunity and treatment for all participants, regardless of gender, gender identity or expression, race, color, national or ethnic origin, religion or religious belief, age, marital status, sexual orientation, disabilities, veteran status, or immigration status.”

Please contact the organizers with any questions.

Stephen DeBacker (smdbackr@umich.edu)

Jessica Fintzen (fintzen@umich.edu)

Muthu Krishnamurthy (muthu-krishnamurthy@uiowa.edu)

Loren Spice (l.spice@tcu.edu)

NSA 2021 Internships

The National Security Agency is accepting applications for their 2021 student internships:

Graduate Mathematics Program: <https://apply.intelligencecareers.gov/job-description/1145700>

Director's Summer Program or Cryptanalysis and Signals Analysis Summer Program: <https://apply.intelligencecareers.gov/job-description/1145699>

The application deadline is in October.



Assistant Professor Position Announced at UC Santa Cruz

The [Mathematics Department](#) at the University of California (UC), Santa Cruz invites applications for a position in Analysis /Geometry/Topology/Dynamical Systems at the Assistant Professor (tenure-track) level. The successful candidate will be expected to contribute to the undergraduate and graduate degree programs, teach, mentor and advise students at the graduate and undergraduate level individually and in the classroom, and undertake service obligations for the department and campus consistent with a ladder-rank faculty member. The successful candidate will also be expected to contribute to research and professional leadership, and must be able to work with students, faculty, and staff from a wide range of social and cultural backgrounds. We welcome candidates who have engaged in teaching, research, professional and/or public service contributions that promote diversity, equity, and inclusion. These can take a variety of forms such as, but not limited to, effective pedagogical strategies used for the educational advancement of students in underrepresented groups; demonstrated contributions to the advancement of access and equal opportunity in education; and participation in activities that support the recruitment, retention, and success of scholars and students. We seek colleagues who will interact and collaborate with faculty from our Department as well as build connections with researchers in other STEM departments on campus such as Physics or Applied Mathematics.

UC Santa Cruz values diversity, equity, and inclusion and is committed to hiring faculty who share these values. UC Santa Cruz is a Hispanic-Serving Institution with a high proportion of first-in-family students. To be considered, candidates must demonstrate an understanding of the barriers facing traditionally underrepresented groups and describe their experience and future plans to promote equity and inclusion in teaching, mentoring, and professional activities. Activities promoting equity and inclusion at UC Santa Cruz will be recognized as important university service during the faculty promotion process.

APPLY AT: <https://recruit.ucsc.edu/apply/JPF00943> Please refer to Position # JPF00943-21 in all correspondence.

Documents/Materials

- Cover letter that briefly summarizes your qualifications and interest in the position (required)
- Curriculum vitae (required)
- Statement of Contributions to Diversity, Equity, and Inclusion: statement addressing your understanding of the barriers facing traditionally underrepresented groups and your past and/or future contributions to diversity, equity, and inclusion through research, teaching, and service.* Candidates are urged to review guidelines on statements before preparing their application: <https://apo.ucsc.edu/diversity.html>
- Statement of Research (required)*
- Statement of Teaching (required)

***Initial applicant screens will focus only on these elements – Research Statement and the Contributions to Diversity Equity and Inclusion Statement. Please review the guidelines on the elements of a good diversity statement and the search committee’s rubric for assessing diversity statements** also found here: <https://apo.ucsc.edu/diversity.html>

Reference Requirement

Applications must include confidential letters of recommendation (a minimum of four are required and a maximum of seven will be accepted) **. At least one letter must address teaching experience and ability. Please note that your references, or dossier service, will submit their confidential letters directly to the UC Recruit System.

**All letters will be treated as confidential per University of California policy and California state law. For any reference letter provided via a third party (i.e., dossier service, career center), direct the author to UC Santa Cruz’s confidentiality statement at <http://apo.ucsc.edu/confstm.htm>.

RECRUITMENT PERIOD

Full consideration will be given to applications completed by December 1, 2020. Applications received after this date will be considered only if the position has not been filled.

The University of California offers a competitive benefits package and a number of programs to support employee work/life balance. For information about employee benefits please visit <https://ucnet.universityofcalifornia.edu/compensation-and-benefits/index.html>

Visit the UCSC Web Site at: <https://www.ucsc.edu> . You can see the more details about this job advertisement on our [website](#).

MSRI Director Search



The Mathematical Sciences Research Institute (MSRI) in Berkeley, California invites applications for the position of Director. This appointment is for a five-year term beginning July 1, 2022, with the possibility of renewal.

MSRI is one of the world's preeminent centers for research in the mathematical sciences and has been advancing knowledge through mathematical research since 1982. Located in the hills above the University of California, Berkeley campus, MSRI hosts some 2,000 mathematicians each year, for stays of up to one academic year. MSRI is independent of UC Berkeley but enjoys a close relationship with the mathematics department and the campus at large. To learn more, visit our website at msri.org or watch this introductory film: [Introduction to the Mathematical Sciences Research Institute \(MSRI\)](#).

MSRI also serves the wider community through activities in mathematics education, public outreach and films for general audiences. Through its public outreach programs, MSRI makes mathematics visible and attractive to those outside the field. MSRI is also widely known for its events highlighting the fundamental role played by mathematics in our cultural heritage. It has been supported from its origins by the National Science Foundation, now joined by the National Security Agency, over 100 Academic Sponsor Institutions, by a range of private foundations, and by generous and farsighted individuals.

The incoming director has a unique opportunity to build on these successes and to lead MSRI in the advancement of its multifaceted mission.

[View full position details and apply at msri.org](https://msri.org)

This is a full-time, exempt position with a competitive compensation, benefits package. This position is partially funded through a grant from the National Science Foundation (NSF).

CAREERS AT THE NATIONAL SECURITY AGENCY

About the Summer Programs

The NSA has summer opportunities for undergraduate and graduate students majoring in mathematics or statistics. Applicants must be enrolled as full time students when the application is submitted. Due to the lengthy processing required, applications must be received by October 15th each year. To initiate your application, visit www.intelligencecareers.gov/nsa.

Director's Summer Program (DSP)

The DSP is the NSA's premier summer outreach to the nation's most outstanding undergraduate mathematics majors. We invite 25 students who have demonstrated superior mathematical aptitude to collaborate with each other and NSA mathematicians on problems critical to the intelligence gathering and cybersecurity missions of the Agency. A full year of abstract algebra and analysis is strongly recommended. Some experience in computer programming, especially in C, Python, and in mathematical software packages is desirable.

DSP participants work on problems in mathematics, cryptology, and communications science that involve applications of abstract algebra, geometry, number theory, probability, statistics, combinatorics, graph theory, algorithms, computer science, and analysis. Each student chooses one of these problems as the focus of their research and documents the work in technical papers which are internally published at NSA.

Cryptanalysis and Signals Analysis Summer Program (CASASP)

The CASASP gives undergraduate mathematicians and computer scientists a chance to contribute to mission-essential technical operations. We invite 12 students to learn, use, and further our tradecraft while working on operational problems of national importance. The problems involve applications of math, statistics, computer science, reverse engineering, and software development with results integrated into production systems for new capabilities.

The CASASP is seeking students majoring in mathematics, computer science, or related engineering fields that have a year of mathematics beyond calculus and some programming experience. Experience in C, C++, Java, Python, or some mathematical software package is desirable.

Graduate Mathematics Program (GMP)

The GMP provides an opportunity for exceptional mathematics and statistics graduate students to work directly with NSA Mathematicians on mission-critical problems and experience the excitement of the NSA mathematics community. Applicants should have demonstrated superior mathematical aptitude and problem-solving skills. Evidence of successful work on an independent project in pure or applied mathematics, statistics, data science, or computer science is desirable. Applicants may be at any stage in their graduate careers or intending to work in any area of mathematics or statistics. Computer programming experience, especially Python, C or C++, is desirable.

GMP participants work on problems involving math, stats, data analysis, cryptology, and communications technology and document their work in technical papers which are internally published at NSA.

Summer Hiring Process

The Summer Internships are 12-week programs held at NSA headquarters in Fort Meade, MD from late May through mid-August. Students will receive annual, sick, and federal holiday leave and are paid a competitive salary based on education level. Subsidized housing is available.

In addition to applying online at www.intelligencecareers.gov/nsa, the below items must be emailed to mathsummer@nsa.gov or sent via postal mail by October 15th to complete the application submission process:

- **Resume or CV**
- **Transcripts of college and university coursework, including community college (official or unofficial accepted)**
- **Two letters of recommendation from faculty members familiar with your technical work**
- **List of courses that will be completed by the end of the academic year**



MATH ALLIANCE MEMBER INSTITUTION

Postdoc Position at University of Washington



JOIN OUR TEAM

Scientist I/II – Machine Intelligence

Understanding the brain constitutes one of the foremost scientific challenges we face. An important aspect of understanding cortical function is to connect the anatomical construction of neural networks with the physiological response characteristics as well as the overall computation performed by the circuit. This effort will draw upon techniques and knowledge from machine learning, computer science, and biology.

We seek an exemplary scientist to join our efforts in understanding the cortical basis of computation. The successful candidate will demonstrate a facility with modern machine learning approaches as well as a strong theoretical foundation in statistics and machine learning. The ideal candidate will also have a strong knowledge of neuroscience, both experimental and computational, and reinforcement learning.

The successful candidate will pursue the construction and analysis of anatomically constrained, task-trained artificial neural network models of cortical function, with the aim of understanding the computational strategies and function of cortex. They will perform data analysis on neurophysiological data and work closely with experimentalists to understand our data.

Essential Duties

- Develop and analyze task-trained, anatomically constrained artificial neural network models.
- In close collaboration with experimentalists and other analysts, work as a team member to analyze large-scale neurophysiological activity.
- Contribute scientific ideas based on the analysis results.
- Develop and maintain computational and associated software tools.
- Publish/present findings in peer-reviewed journals and at scientific conferences.
- Maintain clear and accurate communication with supervisor and other team members.
- Communicate effectively and appropriately to the research community inside and outside the organization.

Required Education and Experience

- PhD degree in Computer Science, Computational Neuroscience, or related discipline.
- 0-2 years of post-doctoral experience.
- Strong computational/data analysis skills; ideally programming in Python.
- Familiarity with PyTorch or TensorFlow.
- Track record of scientific excellence and independent thinking.

Preferred Education and Experience

- Excited about team science and open science.
- Ability to meet aggressive timelines and deliverables in a collaborative environment.
- Excellent written and verbal communication skills.
- Experience in systems neuroscience (especially *in vivo* neural measurements and/or sensory neuroscience).
- Excellent organizational skills and attention to detail.

For more information or to apply, please visit:

<https://alleninstitute.org/what-we-do/brain-science/careers/job-search/>



MATH ALLIANCE MEMBER INSTITUTION

Tenure-Track and Open-Rank Professor Positions in Applied Mathematics at University of Washington



The Department of Applied Mathematics at the University of Washington announces the availability of a tenure-track and an open-rank faculty position to start in September 2021. Candidates will be considered for the Assistant, Associate, or Full Professor rank, either tenure-track or tenured, depending upon experience and qualifications. Candidates with expertise in any areas of applied mathematics are encouraged to apply. Areas of emphasis within the department for these searches are (in alphabetical order) data science, dynamical systems, numerical analysis, scientific computing and stochastic analysis. Applicants should hold a PhD, or foreign equivalent, in (applied) mathematics or a related field of application by the start of the appointment. Applicants should demonstrate accomplishments in research and a commitment to excellence in teaching, service, and mentorship, and to promoting diversity.

The department has current research strength in scientific computing and numerical analysis, nonlinear waves and coherent structures, mathematical biology, atmospheric science and climate modeling, mathematical methods, mathematical finance, data-driven methods, optimization etc., and has a long tradition of interdisciplinary collaboration. Candidates can complement these existing strengths or they can bring in new areas of expertise. See <http://depts.washington.edu/amath/> for more details. The Department is committed to fostering a diverse and inclusive academic community: visit <https://amath.washington.edu/diversity>. All UW faculty members engage in teaching, research, and service.

To apply, applicants should upload all application materials to <http://apply.interfolio.com/78103>. Specifically, the following materials should be provided by November 1, 2020:

- Cover letter or AMS cover sheet,
- Curriculum vita,
- Research statement,
- Teaching statement (addressing your experiences, teaching and mentoring philosophy, and innovation) and evaluations (if available),
- Diversity statement (addressing how your professional experiences, background and philosophy demonstrate your commitment to promoting diversity, equity and inclusion), and by November 15, 2020.

At least four letters of reference, one of which addresses teaching, should be uploaded directly to Interfolio by the letter writers.

If you have any questions, contact Erica Coleman at ecoleman@uw.edu.

The University of Washington is building a culturally diverse faculty and staff and strongly encourages applications from women, minorities, individuals with disabilities and covered veterans. The University is the 2006 recipient of the Alfred P. Sloan award for Faculty Career Flexibility, and is committed to supporting the work-life balance of its faculty. Our NSF-supported ADVANCE program (<http://advance.washington.edu/>) is dedicated to increasing the participation of women in STEM disciplines.



MATH ALLIANCE MEMBER INSTITUTION

Postdoc Fellowship at University of Washington



The University of Washington Computational Neuroscience Center is seeking applications for a Postdoctoral Fellowship at the Swartz Center for Theoretical Neuroscience. The fellow will join the vibrant, collaborative UW theoretical neuroscience community. This fellowship provides the unique opportunity to work with any of the CNC's faculty members, with the freedom to design and develop projects and new collaborations.

Participating faculty members' research includes theory, computation and data analysis, and members interact extensively with colleagues in quantitative experimentation. Experimental work available for close collaboration at UW includes groups performing large-scale recording (electrophysiology, imaging) and neural manipulation (optogenetics) in diverse behavioral tasks. Collaborations with the Allen Institute for Brain Science are also possible.

The Fellowship is available with a starting date in fall 2020, and applications will be considered on a rolling basis until the positions are filled. The fellow will be able to work remotely. To apply please send your CV, a 1-2 page summary of research accomplishments, and a 1-2 page statement of research interests, to cncadmin@uw.edu, please arrange to have 3 letters of reference sent to the same email address.

Please address any questions or inquiries to cncadmin@uw.edu as well!