MATH

Math Alliance News

February 2019 Volume 7, Issue 2



Upcoming Events

SAMSI Undergrad Workshop Research Triangle Park, NC Feb. 25-26, 2019

2019 SIDIM Conference

University of Puerto Rico Humacao, PR March 1-2, 2019

SIAM
Conference on
Applications of
Dynamical Sys.
Snowbird, UT
May 19-23, 2019

IMA- Alliance Summer Workshop University of Minnesota, St. Paul, MN June 6-8, 2019

2019 Field of Dreams Conference St. Louis, MO Nov. 15-17,

2019

Thoughts from the Executive Director...



David Goldberg Executive Director of the Math Alliance

I was going to write in this space to tell you about the wonderful conference for the Gulf States Math Alliance this month. However, I thought this would be a good time to let the Regional Alliance Director, Jianzhong Su, tell you about the conference and their alliance. So, without further ado...

The Third Annual Gulf States Math Alliance Annual Conference at UT Arlington

The <u>Gulf States Math Alliance</u> (GSMA) held its <u>3rd annual conference</u> February 15-17, 2019 at the University of Texas at Arlington. There were 173 registered participants including students, faculty and administrators from 28 campuses, and representatives from industry, government agencies and other organizations. We had faculty and students from Dallas, Collins, and Tarrant community colleges join this year's conference for the first time. You can view the <u>agenda</u> on the GSMA site, and there are photos on the <u>Math Alliance Flickr site</u>.



Professor Richard Tapia, University Professor at Rice University, delivered the keynote speech. He shared his life experiences, his path in mathematics and encouraged faculty and students to pursue global excellence.

The program included panels that discussed various aspects of Gulf States Math Alliance activities, including the graduate school experience, academic and non-academic pathways for math majors, REU's for math majors, the graduate application process, the NSF math bridge to doctorate program at UT Arlington, the F-GAP program and mentoring practices. There was a Graduate School Fair, a student poster session, and poster presenters received recognition at the conference banquet. Dr. Albertha Lawson and Dr. Theresa Martines received appreciation plaques for their contributions to the Alliance. Dr. Phil Kutzko, Director of the National Alliance was the banquet speaker and he shared his experiences in mathematics and remarked on the fast growth of the Gulf States Alliance.

Planning is under way for next year's Gulf States Math Alliance Conference to be hosted by Southern University and A&M College in Baton Rouge, LA. Dr. Albertha Lawson will lead the effort with the assistance of Dr. Tuncay Aktosun and Dr. Jianzhong Su. For more information about the Gulf States Alliance please see our website: (https://www.math.uh.edu/gsmath/index.html).



The 2019-2020 F-GAP Nomination Process has begun!

The Facilitated Graduate Applications Process (F-GAP) is an Alliance program that provides undergraduate seniors 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 senior or Master's student who will be graduating in the Spring of 2020 and will be applying to graduate programs for Fall 2020 please submit student nominations here: https://mathalliance.org/2019-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.")





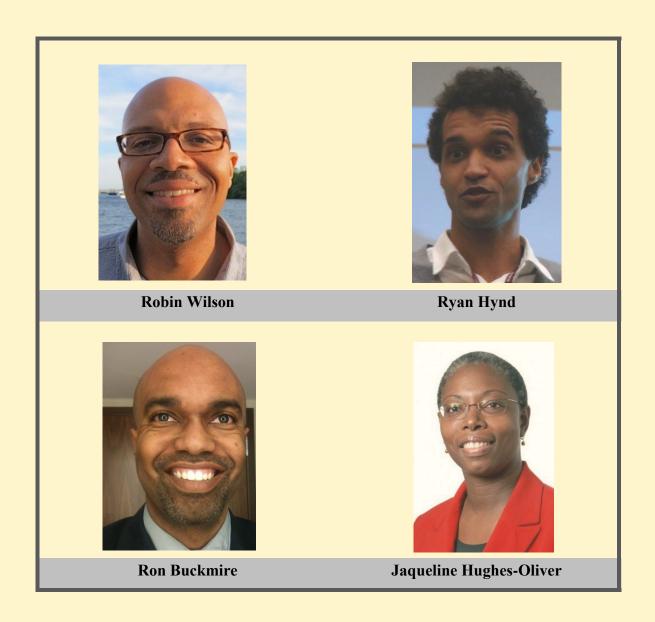


AMS NOTICES CELEBRATES BLACK HISTORY MONTH

The <u>February issue of the AMS Notices</u> has a section devoted to Black History Month. Alliance Mentor Robin Wilson was the editor of this section (see Robin's notes).

This section features research articles by Alliance Mentor Ryan Hynd (<u>Sticky Particle Dynamics on the Real Line</u>), Talea L. Mayo (<u>Predicting the 100-Year Flood to Improve Hurricane Storm Surge Resilience</u>), Edray Herber Goins (<u>The Ubiquity of Elliptic Curves</u>), and Alliance Mentor Jaqueline Hughes-Oliver (<u>Assessment of Prediction Algorithms for Ranking Objects</u>).

The section also features an article by Alliance Mentor, and founding member of NAM, Johnny Houston celebrating the 100th anniversary of the birth of David Blackwell, an article by Alliance Mentor Ron Buckmire on the history of the Blackwell-Tapia Prize, and a memorial tribute to Rudy Horne (faculty member at Morehouse, and mathematical consultant on the movie adaptation of *Hidden Figures*) by Della Dumbaugh.





Things to note in the AMS Notices

In conjunction with Women's History Month, the March issue of the <u>AMS Notices</u> is devoted to highlighting significant contributions to our field and profession by women. These include feature articles on <u>Karen Uhlenbeck</u> by Simon Donaldson, <u>Gertrude Cox</u>, ,by Sharon Lohr, <u>Katherine Johnson</u>, by Alliance Mentor <u>Johnny Houston</u>, <u>Grace Murray Hopper</u>, by Asher Auel, and <u>Joan Birman</u> by Dan Margalit. Sheila Newberry conducts an interview with Karen Uhlenbeck, highlighting the publication of three volumes in *Celebratorio Mathematica* devoted to Uhlenbeck, Joan Birman, and Dusa McDuff. The Communications section includes a feature on Alliance Mentor <u>Talithia Williams</u> and her role hosting *Nova Wonders*. There is a memorial tribute to Marina Ratner, and also a piece by Della Dumbaugh on the impact of Clare Booth Luce on the participation of women in Science.

Scholars, young researchers, and senior mathematicians alike may find the section on Early Career, and advice for writing, as well as thoughts on how to appropriately represent the profession to the public.

Travel support to attend Young Mathematicians in C*-Algebras/Young Women in C*-Algebras

The joint conference Young Mathematicians in C*-Algebras and Young Women in C*-Algebras (YMC*A/YWC*A) will be held in Copenhagen this year, August 5-10. The NSF has generously agreed to provide travel support for about 15 early-career mathematicians (at most 6 years post PhD) to attend YMC*A/YWC*A 2019.

This conference focuses on recent developments in operator algebras (both von Neumann and C*-algebras), noncommutative geometry, and related areas of mathematical analysis, with a particular emphasis on the interplay between operator algebras and the fields of geometric group theory, logic, and dynamical systems. YMC*A/YWC*A is organized for and by master/Ph.D.-students and postdocs in operator algebras and related areas, with the goal of fostering scientific and social interaction between young researchers. The conference will feature three mini-courses by established researchers (Cornelia Drutu, Ilijas Farah, and Ian Putnam) alongside many contributed talks by participants, as well as mentoring activities designed to support underrepresented groups in operator algebras.

More information about YMC*A/YWC*A 2019, including the conference registration form, is available at: https://www.math.ku.dk/english/research/conferences/2019/ymcstara2019/.

If you want to attend YMC*A/YWC*A 2019, and you are a US-based early career researcher and/or a member of an underrepresented group, we encourage you to apply for the travel funding from NSF by **March 10**, **2019** at this link.

IMA- Alliance Summer Workshop

Alliance Workshop at Institute for Mathematics and its Applications (IMA):

The Alliance and IMA will be hosting a workshop on the campus of University of Minnesota, St. Paul, June 6-8, 2019. This workshop will bring in 60 F-GAP students and their mentors to learn about opportunities for math science majors in areas outside of pure mathematics.

Mentors, be sure to nominate your students for F-GAP in a timely way so that we can bring them and you to this workshop! We don't have a link to the workshop site yet, but will soon.



ABOUT

- Starting Fall 2019
- \$32,000 Stipend per year
- Cost of education allowance includes:
 - CA residency tuition and fees
- Travel to professional conferences
- Mentorship
- Professional development
- STEM Ph.D. program application support

ELIGIBILITY

- Participation in LSAMP program at your undergraduate institution
- Bachelor's degree in STEM field
- Admitted to a Fresno State STEM Master of Science (MS) program

M.S. PROGRAMS

- Agricultural Science
- Biology
- Chemistry
- Civil Engineering
- Computer Science
- Computer Engineering
- Electrical Engineering
- Geology
- Mathematics
- Mechanical Engineering
- Physics
- Plant Science

Funded by the National Science Foundation *(Pending Funding Approval)

APPLICATION
fresnostate.edu/csm/lsamp
Deadline: April 12, 2019







Sampling Advanced Mathematics for Minority Students

Dates: July 8 - August 2, 2019

Place: Ohio State University,

Columbus, Ohio

WWW: http://samms.osu.edu

Contact: samms@osu.edu

SAMMS





SAMMS is an innovative mathematics summer program that offers undergraduates from underrepresented minorities a cross-sectional view of life in graduate school. This is accomplished by incorporating graduate level course work, problem-solving and inquiry activities, professional development, and exposure to a large research institution. Invited participants will be provided with lodging and travel reimbursements. Specific activities include the following:

- Mini-courses in Analysis, Algebra, Topology, Combinatorics, Computation.
- Work with local research faculty via inquiry activities and presentations.
- Preparing for graduate school applications and professional development.
- Group studies, social events, and week-end trips.



The program has been developed in a partnership between the Department of Mathematics at The Ohio State University and the Department of Mathematical Sciences at the University of Puerto Rico at Mayagüez.

Visit the web page to apply and find more information. Applications will be considered through March and April until all positions are filled.

Research Opportunities in Mathematics for Minority Students at The Ohio State University

Location: The Ohio State University, Columbus, Ohio.

Web: https://www.mathprograms.org/db/programs/796

Time: 8-10 period from June to August (exact dates TBD)

Contact: Sandy Masters <u>masters@math.osu.edu</u> 614-292-9932

The Department of Mathematics at the Ohio State University invites applications from undergraduate students, primarily from traditionally underrepresented minorities, to pursue research under the tutelage of experienced faculty members. Students work with a faculty member on a project of mutual interest for 8-10 weeks during the summer. The projects will be in the areas of *Topological and Geometric Data Analysis; Number Theory; Dynamics; Applied Mathematics; Algebraic Geometry; Operator Algebras; Ring Theory.*

Program participants are paid a stipend during the summer with additional support for travel and lodging. Exact dates will vary depending on faculty and student availability.

Applications are welcome from students from all schools with priority given to US citizens and Permanent Residents. Required application materials include a cover letter, vita, and reference letter and should be submitted at the link above as soon as possible. For further information and questions please contact Ms. Masters (above).

Central State Mathematics Undergraduate Research (CeSMUR) 2019

If you wish to give a talk, include a abstract of about 1/4 of a page. Funding through a grant from the National Science Foundation is available to help defray participants' travel and lodging expenses. Priority will be given to students presenting talks.

There will be no registration fee and we will negotiate special rates at nearby hotels. We ask students to share rooms in order to be able to benefit the largest number of students with travel and lodging assistance.

The Central States Math Undergraduate Research conference is a joint project of the Departments of Mathematics of:

- Kansas State University
- University of Nebraska at Lincoln
- Truman State University

For more information: https://www.math.ksu.edu/research/i-center/cesmur/2019/index.html

Inquiries or registration: E-mail cesmur@math.ksu.edu.

To register, let us know if you wish to give a talk. Include the name of your school.

Post-baccalaureate Program at Washington University in St. Louis 2019



Applications are now open for the 2019 Joint Post-baccalaureate Program in Mathematics/Statistics, Physics, and Earth and Planetary Science at Washington University. The JPP aims to prepare students who already have a bachelor's degree to make the transition to a Ph.D. program.

Deadline: March 25, 2019. For more information: https://pages.wustl.edu/jointpostbac.

PI4-IMA Summer Internships

PI4-IMA Summer Internships are supported by the <u>Institute for Mathematics and its Applications</u> (IMA) and organized by the <u>Program for Interdisciplinary and Industrial Internships at Illinois</u> (PI4), a successful internship program for graduate students run by the Mathematics Department at the University of Illinois over the past six years, with support from the NSF. With the new funding from the IMA, we are pleased to broaden the availability of internships to students from other institutions.

Four Internships are available for mathematics graduate students in Summer 2019. The internships will be hosted by companies and scientific labs in Champaign-Urbana, Illinois.

Coding skills and soft skills training will be provided as a part of the program. Interns will be placed in pairs where possible to ensure a productive and enjoyable internship experience.

Dates: May 15-July 15, 2019. The program begins with a 12 day intensive workshop on linear algebra and computational skills, focusing on Python and R. Prior coding experience is not required.

For more information, and to apply (by March 17, 2019), please visit the <u>PI4-IMA Summer Internships</u> website. Women and underrepresented US minority students are strongly encouraged to apply.

SUMaR 2019 at Kansas State University

During eight weeks, 10-12 undergraduate students will have the opportunity to visit K-State and carry out research projects under the mentorship of the mathematics department's faculty. This REU encourages applications from students preparing for graduate studies in mathematics, and those from community colleges who might otherwise not have an opportunity to experience mathematics work and consider graduate studies.

Since a subset of the student population we plan to recruit will be early in their studies, and hence expected to have limited experience with mathematical proof, the REU will feature a series of talks by Philosophy faculty Scott Tanona, and Graham Leach-Krouse on epistemology of mathematics and propositional logic.

SUMaR receives its support from the <u>National Science Foundation</u>. As such, according to NSF regulations, it is only open to US citizens and permanent residents. Participants in SUMaR 2019 will receive room and board, a research fellowship of \$4000. Limited travel assistance may be available for students with financial hardship.

For more information visit: https://www.math.ksu.edu/research/reu/.







Eligibility: U.S. Citizens only. Junior-Senior undergraduates and Master graduate students pursuing a degree or recent graduates who have a degree in a science, technology, <u>engineering or mathematics (STEM) discipline or in a discipline that supports the Advanced Manufacturing Office (AMO) mission. Must have demonstrated strong ties to Alaska.</u>

Locations: Idaho National Laboratory, Ames Laboratory and Pacific Northwest National Laboratory

Duration: Appointments beginning Summer 2019 and are 10 weeks in length.

Deadline: April 1, 2019, 5:00 PM EST

Benefits: Stipends start at \$600 per week depending on academic status. May be eligible to receive \$150 per week housing allowance. Up to \$1,000 to support travel to and from the appointment site for participants who live more than fifty miles, one-way from the assigned site.

Lean more and apply now. https://www.zintellect.com/

Questions? DOE-RPP@orise.orau.gov

KYLEREC 2019

Sheafy Symplectic Topology

May 31- June 6, 2019 Truckee, CA

Format Kylerec is a student-led and student-run workshop. We will live in a communal setting, sharing cooking and cleaning responsibilities. Talks will be given by a majority of participants, with guidance from our mentors. Our vision is to foster a healthy, relaxed and creative atmosphere where we can learn mathematics together and make human connections in the process. Graduate students at any stage are encouraged to apply. We especially encourage applications from women, underrepresented minorities, and we are committed to providing assistance to students with disabilities or special needs

Description This year, we will investigate the relationship between the Fukaya categories of exact symplectic manifolds and sheaf theory. Fukaya categories are a central part of modern symplectic topology, mirror symmetry and low-dimensional topology, however they remain very difficult to compute. On the other hand, categories of constructible sheaves are much more concrete and tractable. In the case of a cotangent bundles, the work of Nadler-Zaslow identifies the wrapped Fukaya category with a certain category of sheaves on the zero-section. For more general Weinstein manifolds, it is conjectured that one can find a Lagrangian skeleton, generalising the zero-section of a cotangent bundle, with at worst singularities from Nadlerfls arboreal list. The wrapped Fukaya category is then expected to coincide with a category of sheaves on this skeleton. In particular, this suggests Fukaya categories should themselves exhibit sheafy properties: they might be reconstructed by breaking a symplectic manifold into pieces and gluing together local computations. One approach to doing this is provided by the work of Ganatra-Pardon-Shende, with many important structural implications for wrapped Fukaya categories.

This workshop will survey this circle of ideas. After covering the basics of Floer theory, the Fukaya category and sheaf theory, we will delve into the work of Nadler-Zaslow and Ganatra-Pardon-Shende. We hope to see lots of interesting examples, calculations and applications along the way, in particular the aforementioned arboreal singularities. This should be of great interest to both newcomers to the symplectic and contact geometry, and more advanced graduate students.

The workshop will be mentored by Sheel Ganatra (USC), Xin Jin (Boston College), Laura Starkston (UC Davis), and Umut Varolgunes (Stanford).

Organizers Orsola Capovilla-Searle (Duke), Dahye Cho (StonyBrook), Cédric De Groote (Stanford), Tim Large (MIT), and Sarah McConnell (Stanford).

We are grateful to the NSF for their support. Local expenses (including lodging and food) and partial travel expenses will be covered for participants.

Contact: kylerec2019@gmail.com Webpage: https://kylerec.wordpress.com/ Photo by Alvin Jin.

CIMAT 2019



An innovative undergraduate program in data science, modeling, and more, combining mathematics, statistics and computer science at the Guanajuato Mathematics Research Centre (CIMAT).

The Mathematical Sciences Program in Guanajuato gives students from across the United States, Canada, and other countries the opportunity to spend up to two semesters in Guanajuato, Mexico, studying mathematical sciences, while exploring the rich culture of Mexico and learning Spanish as they go.

The program offers:

- Fall Semester in Mathematical Tools for Modeling
- Spring Semester in Mathematical Tools for Data Science
- Summer Program in Partial Differential Equations
- Optional courses in Spanish and Mexican Culture

All three programs are taught entirely in English. Students will learn the fundamental theoretical bases of pure mathematics, quantitative methods, statistical models, and computer science, equipping them with the ability to choose relevant and efficient algorithmic solutions for solving problems in data science and mathematical modeling. The summer program combines theory, numerical methods, and applications to mathematical finance.

GUANAJUATO, MEXICO

Capital of the state, the city is one of the architectural jewels of central Mexico and is listed by UNESCO as a World Heritage Site. Guanajuato is also the state's most important student city, home to the state's largest educational institution, the University of Guanajuato. Thousands of visitors from all over the world flock to the city each year, making this one of the liveliest and most cosmopolitan cities in all Mexico, famed for its cuisine, its nightlife, and its friendliness to visitors.

PARTICIPANT PROFILE

- Intended major in mathematics, statistics or computer science, or any major with a strong grounding in mathematics.
- At least one Linear Algebra course and Differential, Integral and Multivariate Calculus courses.
- Interested in exploring mathematics to a deeper, more sophisticated level.
- Eager to experience life in a different culture.
- The specific requirements for each semester and the summer program can be found at:

mathsciencesgto.cimat.mx



▶ ABOUT CIMAT

The program has been developed based on the strengths of CIMAT, one of Mexico's leading research centers in the fields of mathematics, statistics, and computer science, focusing particularly on enhancing the relationship between these disciplines. With four decades of experience, CIMAT is recognized both at home and abroad for its tradition of educational excellence and its contribution to the development of students from both Mexico and around the world. CIMAT is also well-known for its applied research projects, its technological and consulting services, and its training programs and initiatives for the dissemination of mathematical knowledge.

www.cimat.mx



Launch the NExT stage of your career

MAA Project NExT (New Experiences in Teaching) is a year-long professional development program for new or recent Ph.D.s 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.

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.

Application deadline:
April 15, 2019
projectnext.maa.org
projectnext@maa.org

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 and encourages 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 for the 2019 cohort of MAA Project NExT Fellows are due on April 15, 2019 and can be found at projectnext.maa.org.



Project NExTers at MAA MathFest in Denver.

IAS School of Mathematics Accepting Applications

2019-2020 MEMBERSHIP



THE SCHOOL OF

MATHEMATICS

The School of Mathematics welcomes applications from postdoctoral, mid-career, and senior mathematicians and theoretical computer scientists, and strongly encourages applications from women and minorities.

Stipends, on-campus housing, and other resources are available for periods of 4-11 months for individual researchers in all mathematical subject areas. The School supports approximately 40 post-docs per year. In 2019-2020, there will be a special-year program called "Optimization, Statistics, and Theoretical Machine Learning" led by Sanjeev Arora of Princeton University, however, Membership will not be limited to mathematicians in this field.

For more information, please visit: math.ias.edu/administration/membership



Programs.

EMERGING TOPICS math.ias.edu/emergingtopics

WOMEN & MATHEMATICS math.ias.edu/wam/2019

SUMMER COLLABORATORS math.ias.edu/summercollaborators

Application Deadline:

December 1, 2019 mathjobs.org



Post-Doctoral Fellow Position at University of Michigan Biostatistics Department

The Department of Biostatistics, University of Michigan School of Public Health invites applications for a post-doctoral research fellow, to be working in the area of electronic health records, gene-environment interaction, shrinkage estimation and statistical methods for analyzing biobank data in collaboration with Dr. Bhramar Mukherjee. Candidates should have a doctoral degree in Biostatistics, Statistics, Mathematics, Computer Science, Human Genetics, Epidemiology, Bioinformatics or any related quantitative field. A qualified candidate will have a demonstrated track-record of successful research as evidenced by papers, software and preprints. Strong written and communication skills are desired along with a passion for conducting impactful and influential scientific research. The successful applicant for this position will work in a team of graduate students, post-doctoral fellows, staff and faculty colleagues. Experience in R programming is required, programming in Python, C++ or other programming language, a broad interest in computational statistics and developing R packages and scalable algorithms is an added plus.

Expertise or experience in any of the following areas will be helpful: Bayesian methods, causal inference, high-dimensional statistics, machine learning, mediation, missing data, sample survey, selection and shrinkage methods. This is a two-year position with a possible third year. Salary and benefits are competitive. Considerations of applications will begin immediately and continue until the position is filled. The University of Michigan is an affirmative action/equal opportunity employer. Applications from women and minorities are welcomed and strongly encouraged.

Applicants should submit a cover letter, CV, name and contact information of three references to:

Davina Barron, B.Sc. 1415 Washington Heights Ann Arbor, MI 48109-2029 Email: davinab@umich.edu Phone: 734-936-0458

The start is flexible but ideally the candidate can start early in 2019.

The University of Michigan School of Public Health (UMSPH) is internationally recognized for its excellence, and has been ranked consistently as a premier entity. Since its organization in 1941, the School has produced a cadre of prominent public health leaders (for example, thirteen American Public Health Association presidents have been University of Michigan faculty or graduates). The School aims to provide an understanding of the health aspects of human beings, their interaction with the biological, physical, and social environment, and the application of this knowledge to community health problems.

The Department of Biostatistics within UMSPH is ranked number one in the nation by the National Research Council. The department consists a thriving body of 46 faculty, 202 students and 111 research and administrative staff members. The department has been at the forefront of research and training in Biostatistics. Department faculty have active, well-funded research programs emphasizing development of statistical methods and their application to biomedicine. Direct cost grant funding for 2017 was \$27 million. The Department has close ties with the Department of Statistics, the Institute for Social Research, the Medical School, the Michigan Institute for Data Science, The Institute of Health Policy and Innovation and other research groups across campus. The University of Michigan offers competitive salaries and excellent benefits. Ann Arbor is a progressive city of about 118,000 year-round residents, and approximately 43,000 students, with excellent schools and a wide variety of sporting and musical activities. It is rated very highly in national surveys for its quality of life and has the amenities of a city many times its size.



Two Year Postdoctoral Position in the Department of Mathematics at The University of Pittsburgh



The Department of Mathematics at the University of Pittsburgh invites applications for a two-year postdoctoral position on the formalization of mathematics, to begin in the Fall Term 2019.

We seek excellence in research and significant experience with proof assistants. Salary and benefits are competitive.

Submit a vita, three letters of recommendation, a research statement electronically through https://www.mathjobs.org/jobs/jobs/13437. Review of completed files will begin January 15, 2019 and will continue until the position is filled.

The University of Pittsburgh is an Affirmative Action, Equal Opportunity Employer. Women and members of minority groups under-represented in academia are especially encouraged to apply.





Postdoctoral Fellowship in Environmental Health Biostatistics at University of Rochester

POSITION TITLE: Postdoctoral Fellowship in Environmental Health Biostatistics

The Department of Biostatistics and Computational Biology at the University of Rochester (UR) announces an opening for a postdoctoral traineeship in Environmental Health (EH) Biostatistics, funded by an NIEHS T32 training grant. The appointee will develop and apply novel statistical methodology for projects related to EH, under the mentorship of a Biostatistics faculty trainer (Drs. Sally W. Thurston, Matthew N. McCall, Brent Johnson, Tanzy Love, Michael McDermott, David Oakes, or Robert Strawderman).

The specific methodological focus may be based in part on the trainee's interests, and will involve co-mentorship from a leading environmental health researcher. Examples of EH topics include studies of (a) the associations between air pollution exposure and biomarkers thought to indicate increased risk of future cardiac events; (b) effects of pre- and post-natal mercury exposure from fish consumption on multiple outcomes in childhood and adolescence; (c) RNA sequencing to quantify the effect of dioxin exposure on CD8+ T-cell gene expression accounting for an unknown mixture of responders and non-responders; and (d) methods to quantify morphologic changes in microglia in response to pharmacological alterations of noradrenergic signaling in the brain. Methodological expertise among T32 faculty trainers includes Bayesian MCMC methods, models for multiple outcomes, latent variable models, measurement error, missing data, causal inference, survival analysis, clustering, statistical genomics, molecular systems biology, and bioinformatics. The appointee will also receive training in advanced biostatistics and in toxicology, and be involved in other collaborative work with EH researchers.

For more information see https://www.urmc.rochester.edu/biostat/training-grant.aspx.

Position qualifications: In accordance with NIEHS requirements, trainees must be a US citizen or permanent resident, and must have completed a doctoral degree in statistics or a related subject by the appointment start date. We seek a highly motivated candidate with a strong statistical background, excellent programming skills and good communication.

Appointment: The position is available for 12 months initially. Applicants with a start date on or prior to June 1, 2019 have the possibility of renewal for a second year by mutual agreement. An earlier start date is preferred.

To apply: A cover letter describing research experience, a current CV and contact information for three references should be sent by email to Sally_Thurston@urmc.rochester.edu (please reference "NIEHS postdoctoral position" in the subject line).

The University of Rochester is an Affirmative Action, Equal Opportunity institution. Applications from women and under-represented minorities are particularly encouraged.



Tenure-Track Assistant Professor in Department of Mathematics and Statistics at California State Polytechnic University, Pomona



The Department of Mathematics and Statistics in the College of Science at California State Polytechnic University, Pomona (Cal Poly Pomona) invites applications for a tenure-track position in Pure Mathematics at the rank of Assistant Professor to begin Fall Semester 2019. Join a growing and dynamic group of mathematicians, statisticians, and mathematics educators actively engaged in teaching and scholarship.

The Position: Throughout the academic year, you will typically teach a mix of courses in mathematics at the lower division, upper division, and graduate levels. As part of your professional development, we encourage you to engage our graduate students in your scholarly activities. Optimally, you will eventually become the academic adviser of some of our graduate students, helping them by supervising their thesis topics. There are many service opportunities available within our department, college, and university.

A Cal Poly Pomona application form (https://www.cpp.edu/~faculty-affairs/documents/acadapplication.pdf) will be required if you are selected as a finalist.

Submit *all* materials via AMS <u>MathJobs.</u> In addition, you must *also* submit your cover letter, curriculum vitae, and Student Success Statement to Interfolio: https://apply.interfolio.com/55753.

Your completed application packet will be available to be examined by all tenured and tenure-track faculty of the Cal Poly Pomona Department of Mathematics and Statistics. This position is open until filled. Those applications completed and received by **November 14, 2018** will receive first consideration. Early response is encouraged.

For More Information:

http://www.cpp.edu/~math/

Cidni Griffith -mathstatsearch@cpp.edu (909) 869-3496 3801 W Temple Ave. Department of Math & Stats Pomona, CA 91768-4007

List of other Position Announcements

University/Institution	Type of Position	Link for Applications
Amherst College	Visiting Assistant Professor in Statistics	<u>MathJobs</u>
Appalachian State University	Tenure-Track Assistant Professor in Mathematics	Via email to mathscisearch@appstate.edu
Clarkson University	Tenure-Track Assistant Professor in Mathematics	<u>MathJobs</u>
Marian University	Tenure-Track Assistant Professor in Statistics	Via email to hr@marian.edu
Mt. Holyoke College	Assistant Professor of Mathematics	Apply Here
San Jose State University	Tenure-Track Assistant Professor position in Applied Mathematics	Apply Here
San Jose State University	Tenure-Track Assistant Professor position in Optimization	Apply Here
Smith College	Tenure-Track Assistant Professor in Mathematics	Apply Here
St. John's University	Tenure-Track Assistant Professor in Mathematics or Computer Science	Apply Here
The New School	Assistant Professor of Mathematics	Apply Here
University of Washington, Tacoma	Tenure-Track Lecturer Positions in Math	Apply Here
University of Washington, Tacoma	Tenure-Track Assistant Professor in Statistics	Apply Here
University of Washington, Tacoma	Tenure-Track Assistant Professor in Mathematics	Apply Here
US Naval Academy	Tenure-Track Assistant Professor in Operations Research	<u>MathJobs</u>
US Naval Academy	Tenure-Track Assistant Professor in Mathematics	<u>MathJobs</u>
Villanova University	Tenure-Track Assistant Professor in Mathematics	<u>MathJobs</u>
Xavier University in Lousiana	Tenure-Track Assistant Professor in Mathematics	Apply Here