



## Upcoming Events

**Gateway Regional Alliance Conf.**  
Harris-Stowe Univ.  
St. Louis, MO  
April 6, 2019

**Math Alliance Executive Council Meeting**  
Purdue Univ.  
April 12, 2019

**Math Alliance Member & Partners Meeting**  
Purdue Univ.  
April 12, 2019

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

**IMA- Alliance Summer Workshop**  
Univ. 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

As the annual March Madness basketball bingeing comes into view, I think we have our own version of March Madness here at the Alliance. The 2018-19 F-GAP program is coming to fruition, in that we are starting to hear about the success of our F-GAP students' applications to grad programs, and also trying as hard as possible to get all of those folks to report this information to us – please help us out if you can! The 2019-20 F-GAP program is ramping up and along with this we are planning a workshop at **Institute for Mathematics and its Applications (IMA) at the University of Minnesota, June 6-8** for some of our F-GAP Scholars and their Mentors. Those students and faculty who will be invited will be notified soon, so please be sure to nominate your students ASAP if you want to be considered for this event.

The planning is well under way for the 2018-19 Field of Dreams Conference, which will be **November 15-17 in St. Louis, MO**. Washington University in St. Louis will, again, be our host institution, and we hope they know how much we appreciate their support!!

We are approaching our annual Spring Executive Council Meeting, and Center for the National Math Alliance Partner's Council Meeting, which are held together here at Purdue. This is where the governing body for the Alliance discusses and makes policy decisions and plans activities and strategies for the coming year, and where we also seek advice from those institutions who are partners in supporting the work of the Alliance (currently, Purdue University, University of Iowa, University of Minnesota, and Washington University in St. Louis) and we really thank those places for their continued support and advice. We hope to be able to announce some new partnerships soon, as well!! We are also planning to present the work of the Alliance to a very broad audience at a Sloan Indigenous Graduate Partnership workshop, here at Purdue (the flyer for this appears below in the newsletter). Many other future plans and collaborations with our regional alliances are under way, and we hope to have more news on those soon.

This is all by way of saying the Executive Director has a lot to report, and will do so in future newsletters, but is a little busy to give too many details this month. Enjoy the Madness...

## Uhlenbeck wins Abel Prize

Professor Karen Uhlenbeck, is the recipient of the 2019 Abel Prize. Professor Uhlenbeck is the first woman to win the Abel Prize, and she is a Professor at the University of Texas at Austin. Read the statement from AMS President Jill Pipher about this award [here](#).

**Congratulations to Professor Karen Uhlenbeck!**

# The 2019-2020 F-GAP Nomination Process has Begun!

The Facilitated Graduate Applications Process (F-GAP) is an Alliance program that provides undergraduate juniors, 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 an undergraduate or Master's student who will be graduating in the Spring of 2020 and will be applying to graduate programs for Fall 2020, **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.”](#))



## Things to note in the AMS Notices

In conjunction with Women's History Month, the March issue of the [AMS Notices](#) is devoted to highlighting significant contributions to our field and profession by women. These include feature articles on [Karen Uhlenbeck](#) by Simon Donaldson, [Gertrude Cox](#), by Sharon Lohr, [Katherine Johnson](#), by Alliance Mentor [Johnny Houston](#), [Grace Murray Hopper](#), by Asher Auel, and [Joan Birman](#) 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 [Talithia Williams](#) 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.





# STRATEGIES TO ATTRACT AND SUPPORT URM GRADUATE STUDENTS

Friday, April 5, 2019

Martin Jischke Hall (MJIS), Room 1001

9:00 am – 4:30 pm

*Lunch is included*

Effective recruitment and mentoring strategies for under-represented minority (URM) graduate students are crucial for student success and for creating a more diverse and inclusive university. Workshop participants will learn about effective strategies from national experts and about resources available to graduate students and mentors at Purdue.

This workshop is funded by the Alfred P. Sloan Foundation and co-sponsored by the Purdue University Graduate School.

For more information on the Sloan Foundation, please visit their website:

<https://sloan.org/programs/higher-education>

For more information on Purdue University Graduate School diversity initiatives

please visit their website: <https://www.purdue.edu/gradschool/diversity/>

**PURDUE**  
GRADUATE SCHOOL



Alfred P. Sloan  
FOUNDATION

## **Staying Relevant in a Shifting Landscape: The SREB Approach to URM Ph.D. Production and Faculty Diversity**

Presented by:

*Dr. Ansley Abraham*

## **Meyerhoff Scholars Program: Changing Minds**

Presented by:

*Mitsue Wiggs*

University of Maryland-Baltimore  
County

## **The Math Alliance: Building a national mentoring community**

Presented by:

*Dr. David Goldberg*  
Purdue University

## **Purdue AGEP and LSAMP Programs: A Coevolution of Successful Mentoring Strategies**

Presented by:

*Dr. Ignacio Camarillo*  
Purdue University

## **The Sloan Indigenous Graduate Partnership: A Fifteen Year Effort to Build Community and Support Students**

Presented by:

*Dr. Kevin Gibson*  
Purdue University

## **Who Gets to Participate?**

Presented by:

*Dr. Jacqueline Looney*  
Duke University



# FRESNO STATE CSU-LSAMP BRIDGE TO THE DOCTORATE

## 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/lisamp](http://fresnostate.edu/csm/lisamp)

**Deadline: April 12, 2019**



2555 E. San Ramon Ave., M/S SB68, Fresno, CA 93740 P 559.278.4748



# 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](mailto:samms@osu.edu)

# SAMMS



THE OHIO STATE  
UNIVERSITY



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.



2016 DWMP Chicago, IL

*10<sup>th</sup> Anniversary*

## **2019 JOINT STATISTICAL MEETINGS** **Diversity workshop and Mentoring Program**

**July 28- July 31, 2019,**  
**Denver, Colorado**

The JSM Diversity Workshop and Mentoring Program brings minority (African-American, Hispanic/Latino, and Native American) statisticians/data scientists at early to mid-career levels (i.e., graduate students, post-doctoral scholars, professionals from govt, private sector and academia) together with senior-level statisticians and faculty in academia, government and the private sector for a structured interactive program of career skills development, one-on-one mentoring, and networking for career success.

Information and Application Form:

<https://community.amstat.org/cmis/events/dwmp/dwmp2019>

**Priority Registration Deadline: June 1** (Student travel awards available)

Applications received after June 1 are accepted as long as space is available.



Sponsored by the American Statistical Association's Committee on  
Minorities in Statistics

*Celebrating*

*10 Years of*

**Mentoring**

—

**Skills Development**

—

**Networking**

—

**Developing Leaders**

—

**Growing Community**

—

**Ensuring a Diverse  
Profession**



## 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 -August (exact dates TBD)

**Contact:** Sandy Masters [masters@math.osu.edu](mailto:masters@math.osu.edu) 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 Math 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](mailto:cesmur@math.ksu.edu). To register, let us know if you wish to give a talk. Include the name of your school.

## Lathisms 2019 Nominations Announcement

Lathisms welcomes nominations for its 2019 Honorees whose contributions will be showcased in the Lathisms Calendar during Hispanic Heritage Month, which is celebrated in the United States from September 15 to October 15. This year's theme is mathematics education (broadly defined).

Nominees must satisfy the following criteria to be considered as a Lathisms Honoree.

1. Identify as Latinxs and/or Hispanic
2. Demonstrate evidence of a strong commitment to the advancement of Latinx and/or Hispanics in the Math Sciences
3. Have demonstrated outstanding contributions to the Mathematical Sciences in at least one of the following areas: research, teaching, mentoring, and/or service

Nominations are accepted year round, but to be featured in this year's Lathisms Calendar the nomination must be submitted by **April 15, 2019**. For past honorees, please visit: [www.lathisms.org](http://www.lathisms.org)



## 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> .

## North Carolina Central University and North Carolina State University Bridge-to-PhD Program

The Bridge-to-Ph.D. is a component of the NC State NSF Research Traineeship on Data-Enabled Science and Engineering of Atomic Structure (SEAS), which is designed to broaden the participation of students from underrepresented populations in doctoral degrees in the physical sciences, mathematical sciences, and engineering disciplines. Students matriculate through a Master's degree program at NCCU and engage in co-advised, data science-related thesis research, special seminars, workshops, and lab rotations with NC State faculty and students. Upon completion of the M.S. at NCCU, SEAS Bridge-to-Ph.D. trainees are expected to transition to Ph.D. studies at NC State or another Ph.D.-granting institution.

The Bridge-to-Ph.D. is open to students in materials science, engineering, statistics, mathematics, chemistry, physics and other related science and engineering disciplines. Interested students will need to be admitted to a Master's program in physics, mathematics, or chemistry through the NCCU School of Graduate Studies for participation in the Bridge-to-Ph.D. program. **Deadline for Fall 2019 admission is July 1, 2019.**

Fellowship funding includes a stipend (up to \$34,000) plus cost of attendance, tuition and fees. The Bridge-to-Ph.D. receives support from the National Science Foundation. As a result, program fellowships are only open to US citizens and permanent residents. Regular department assistantships are open to all other graduate students who are selected as SEAS Bridge trainees.

For more information, visit: [www.mse.edu/seas](http://www.mse.edu/seas) or email [seas\\_graduate\\_nrt@ncsu.edu](mailto:seas_graduate_nrt@ncsu.edu)

## 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 [National Science Foundation](#). 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/>.



U.S. DEPARTMENT OF  
**ENERGY**

Energy Efficiency &  
Renewable Energy



**OAK RIDGE INSTITUTE**  
FOR SCIENCE AND EDUCATION



# Alaskan Summer Internship Program

sponsored by The U.S. Department of Energy, Office of Energy  
Efficiency and Renewable Energy, Advanced Manufacturing Office

**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, [engineering or mathematics \(STEM\) discipline or in a discipline that supports the Advanced Manufacturing Office \(AMO\) mission](#). Must have demonstrated strong ties to [Alaska](#).

**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](mailto: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 Nadler's 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 (Stony Brook), 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](mailto: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](http://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](http://www.cimat.mx)





# MAA Project NExT

NEW EXPERIENCES IN TEACHING

## 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](http://projectnext.maa.org)**

**[projectnext@maa.org](mailto: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](http://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](http://math.ias.edu/administration/membership)



#### *Programs:*

**EMERGING TOPICS**  
[math.ias.edu/emergingtopics](http://math.ias.edu/emergingtopics)

**WOMEN & MATHEMATICS**  
[math.ias.edu/wam/2019](http://math.ias.edu/wam/2019)

**SUMMER COLLABORATORS**  
[math.ias.edu/summercollaborators](http://math.ias.edu/summercollaborators)

*Application  
Deadline:*

December 1, 2019  
[mathjobs.org](http://mathjobs.org)







## MATH ALLIANCE MEMBER INSTITUTION



UNIVERSITY of  
**ROCHESTER**  
MEDICAL CENTER

### 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](mailto: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.*

## List of other Position Announcements

<b>University/Institution</b>	<b>Type of Position</b>	<b>Link for Applications</b>
<b>Clarkson University</b>	<a href="#"><u>Tenure-Track Assistant Professor in Mathematics</u></a>	<a href="#"><u>MathJobs</u></a>
<b>San Jose State University</b>	<a href="#"><u>Tenure-Track Assistant Professor position in Applied Mathematics</u></a>	<a href="#"><u>Apply Here</u></a>
<b>San Jose State University</b>	<a href="#"><u>Tenure-Track Assistant Professor position in Optimization</u></a>	<a href="#"><u>Apply Here</u></a>
<b>Smith College</b>	<a href="#"><u>Tenure-Track Assistant Professor in Mathematics</u></a>	<a href="#"><u>Apply Here</u></a>
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