

Upcoming

NCSU BFF Program

North Carolina State University
March 14-16, 2018

USTARS

Reed College
April 6-8, 2018

Infinite Possibilities Conference

Howard University
April 14-15, 2018

CeSMUR Undergrad Conference

University of Nebraska-Lincoln
April 20-21, 2018

MOCA Network Workshop

Iowa State University
Aug. 6-10, 2018

Field of Dreams Conference

St. Louis, MO
Nov. 2-4, 2018

Summer 2018

The annotated REU page on our website has been updated for this summer.

We would like to thank Prof. Bill Vélez for helping us with this again this year.

<https://mathalliance.org/math-alliance-partners/>

Thoughts from the Executive Director...

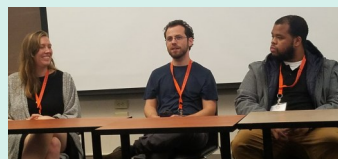
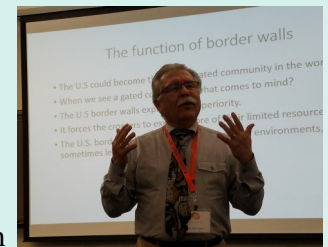


David Goldberg
Executive Director
of the National
Math Alliance

The month of February has been an exciting time here at the Alliance. We are fast approaching 750 Alliance Mentors, about 200 more than when the Alliance moved to Purdue in March, 2016. Speaking of which, we are coming to the second anniversary of that move, and that time has flown by. I want to publicly thank Purdue University, again, for providing the funding for the operational costs of the Alliance for the last two years. We are hoping, with the formation of the Center for the National Math Sciences Alliance in the College of Science at Purdue, that we now have a funding model which will sustain the Alliance for the future. I want to express my appreciation for all of the departments that have become members of the Center, which is a big boost for us. We hope you'll all continue to support us in this way, and hope some of our other GPGs will join the Center this year. I also want to thank Purdue, University of Iowa, and

Washington University in St. Louis for being Center Partners, and making such substantial contributions to help the Alliance grow and thrive. Speaking of St. Louis, we were pleased to hear of the positive developments at the recent organizational meeting for the Gateway Math Alliance, our newest regional alliance. We've seen the effect of strong regional alliances, with the Pacific Math Alliance and the Gulf States Math Alliance. Both have seen their mentor and student numbers grow rapidly since their formation.

The Gulf States Math Alliance just held their second annual conference, February 23-24, at Tulane University in New Orleans, and it was a great success. Thanks to Tulane for providing such generous support for the Gulf States Conference, and thanks to Michelle Lacey for all the local organization. There were approximately 150 participants, an increase of about 35% from their first conference. William Vélez delivered a wonderful keynote address, urging mathematics departments to adapt themselves to the scientific landscape of the 21st century. Students were treated to several interesting panel discussions on how to prepare for and succeed in graduate school, and there was a lot of networking and connections made. I am so impressed with the commitment of the faculty, particularly those from four-year colleges, in the region to their students. Some drove their students for several hours each way so they could attend the meeting. We also saw and heard from several students in the [University of Texas at Arlington's](#) Bridge to the Doctorate program. We are so pleased to see this bridge program succeed, and hope we will see more programs which provide transitional opportunities for our students. We are looking forward to seeing this first wave of UTA bridge students enter Ph.D. programs in another year! I think 2018 is off to a great start for us. As usual, all the credit needs to go to our mentors, who give so much to our Alliance and our Scholars, for their passion and determination and for their desire to make a difference in our profession. This is truly a remarkable community.



Juan Meza Appointed as next Director for the Division of Mathematical Sciences



The Alliance was pleased to see the announcement from the National Science Foundation that Juan Meza, former Dean of Natural Sciences at University of California, Merced, has been named as the next Director for the Division of Mathematical Sciences (DMS). Professor Meza is a Professor in the Applied Mathematics Department at UC Merced, which was one of our earliest Graduate Program Groups, and our first Doctoral Program Group in California. The Applied Mathematics Department at Merced has been a great supporter of the Alliance and Professor Meza has been a leader in that Department for many years. Professor Meza received his B.S. and M.S. in Electrical Engineering, and his Ph.D. in Computational and Applied Mathematics, all from Rice University (1978, 1979, and 1986, respectively). He has held a number of distinguished appointments, including Senior Scientist for High Performance Computing Research at Lawrence Berkeley National Laboratory, and Distinguished Member of the Technical Staff at Sandia National Laboratories. He has played a prominent role nationally in several organizations, including several devoted to diversity, notably SACNAS, and was the recipient of the 2008 Blackwell-Tapia Prize, among many other awards.

To read more about Professor Meza's new appointment, you can view the [press announcement at UC Merced](#). We extend our congratulations and best wishes to Professor Meza in his new role.

Kutzko delivers plenary address at MSRI Workshop

Alliance Founder and Director, Philip Kutzko, was the plenary speaker at the recent "Critical Issues in Mathematics Education 2018: Access to mathematics by opening doors for students currently excluded from mathematics" workshop at the Mathematical Sciences Research Institute (MSRI) in Berkeley, California. Kutzko's title was "The Math Alliance: A community based approach to broadening participation in the mathematical sciences."

The list of speakers and participants is available at the [workshop website](#), and there is a [video of Kutzko's address](#) along with a subsequent discussion with the moderator, Professor Nicole Joseph of Vanderbilt, and a lively discussion session posted there as well.

INFINITE POSSIBILITIES

Conference for **Women of Color** in Mathematics & Statistics

Howard University · Washington, D.C.

infinite possibilities
CONFERENCE

APRIL 14-15, 2018

"... rejuvenating and reenergizing."

- 2015 IPC participant

The Infinite Possibilities Conference (IPC) is a national conference designed to **promote, educate, encourage and support** women of color interested in careers in mathematics and statistics.

KEYNOTE SPEAKERS



Chelsea Walton

Temple University



Maria Mercedes Franco

Queensborough Community College CUNY

FEATURED PANELISTS



Carla Cotwright-Williams

U.S. Department of Defense

Maria Garcia

U.S. Census Bureau

Leona Harris

University of the District of Columbia

Karoline Pershell

Association for Women in Mathematics
Service Robotics and Technologies

**Research Talks & Poster Sessions · Mentoring & Career
Breakout Sessions · Professional Development · Community**

CONFERENCE FEE*

- \$20** Undergraduate and Graduate Students
- \$30** Postdocs
- \$50** Faculty, Government and Industry Professionals

* For registration by March 15, 2018.

REGISTER ONLINE

Funding Deadline: March 2, 2018
Registration Deadline: April 14, 2018

"[Meeting] so many women of color who earned PhDs in math and statistics... blew me away and kept me coming back for more."

- Past conference participant



msri.org/infinite2018



**Mathematical Sciences Institutes
DIVERSITY INITIATIVE**

What is the Mathematical Sciences Institutes Diversity Initiative?

With funding from the National Science Foundation, this initiative is a collaboration among the mathematical sciences institutes to increase the participation of underrepresented groups in the mathematical sciences, including women, underrepresented racial and ethnic minorities, and persons with disabilities. Learn more: mathinstitutes.org/diversity/



CeSMUR

UNDERGRADUATE CONFERENCE 2018

The **Central States Mathematics Undergraduate Research conference** is a mathematics conference intended for undergraduates. It features two plenary talks given by eminent mathematicians, and talks given by undergraduates describing their own research. The conference is on the University of Nebraska-Lincoln City Campus, with lodging at Embassy Suites in downtown Lincoln.

FRIDAY, APRIL 20

Avery Hall, 1 p.m. - 7:30 p.m.

SATURDAY, APRIL 21

Jorgensen Hall, 9 a.m. - 5 p.m.

**REGISTER ONLINE
BY MARCH 25**

If you are interested in giving a talk, please submit an abstract when you register. If you need travel support, you also can apply when registering.

N
MATHEMATICS

<https://www.math.unl.edu/events/cesmur>



Conference supported by the National Science Foundation, the UNL Research Council and the UNL Faculty Senate.

PLENARY SPEAKERS



Prof. Carina Curto
Pennsylvania State
University



Prof. Michael Young
Iowa State University

FINANCIAL SUPPORT

Funding is available to support the travel and lodging expenses of conference participants, with preference given to those participants giving presentations.

UNL does not discriminate based upon any protected status. Please see go.unl.edu/nondiscrimination.

Summer Undergraduate Research Program At Lamar University



BIG DATA ANALYTICS, DATA
DIMENSION REDUCTION,
MATRIX FACTORIZATION,
& GRAPH THEORY



REU AT LU

REU at LU is a 10 week research and academic experience hosted by Lamar University in Beaumont, Texas. This REU site offers sophomores, juniors and seniors from accredited U.S. colleges or universities the opportunity to perform summer research in the fields of big data analytics, data dimension reduction, matrix factorization & graph theory. Students at this site will be engaged in all stages of the big data analysis cycle. REU at LU is designed to spark and sustain a new excitement about undergraduate research through mathematics and statistics disciplines.

PROGRAM DETAILS:

- 10 week summer research program
- Stipend of \$5,000
- Apartment-style housing within walking distance
- Meal plan included
- Women, Students with Disabilities, Veteran Students, & Underrepresented Students are encouraged to apply

The program is made possible from a generous grant from the National Science Foundation

Qualifications:
U.S. Citizen or permanent resident enrolled as a rising sophomore, junior or senior at an affiliated institution.

Program Dates

June 4 to August 13, 2018

Application date:

Apply by March 29, 2018

Contact:

Kumer P. Das, PhD
Professor of Statistics
Lamar University
440 MLK Blvd.
P.O. Box 10052
Beaumont, Texas 77710
409-880-7947

kumer.das@lamar.edu

Website:

<http://www.lamar.edu/undergraduate-research/stat-reu/stat-research-experience-undergraduate.html>



LAMAR UNIVERSITY
MEMBER THE TEXAS STATE UNIVERSITY SYSTEM™

USTARS 2018

ust*rs.

underrepresented students in topology and algebra research symposium

The Eighth Annual USTARS
will be held on April 6-8, 2018
at Reed College
in Portland, OR

Faculty Speaker: Jose Perea
from Michigan State University

Check out www.ustars.org
for more information and to
apply to attend and present.

The primary mission of the Underrepresented Students in Topology and Algebra Research Symposium (USTARS) is to showcase the excellent research conducted by underrepresented students studying topology and algebra. Dedicated to furthering the success of underrepresented students, USTARS seeks to broaden the participation in the mathematical sciences by cultivating research and mentoring networks. USTARS is open to all people interested in the topological and algebraic fields.

(Our definition of underrepresented includes the definition provided the National Science Foundation: minorities (African American, Hispanic, and Native American), women, and individuals with physical disabilities.) *

Save the Date

April 6-8, 2018

Reed College

ust*rs.

underrepresented students in topology and algebra research symposium

For more information, check out

www.ustars.org

or email us at

info@ustars.org

REED COLLEGE



Bridge to Enter Advanced Mathematics (BEAM)

Open Summer Positions at Bridge to Enter Advanced Mathematics (BEAM)

Counselor/Teaching Assistant (for current undergrads)

This summer, change the lives of talented middle school students from underserved backgrounds.

Bridge to Enter Advanced Mathematics (BEAM), a project of the Art of Problem Solving Initiative, Inc., is seeking undergraduate students or recent graduates to be counselors and teaching assistants for a summer program that gives everyone a chance to excel in mathematics. During summer 2018, we will run residential programs at Bard College and Union College in the Hudson Valley, and day programs in New York City and Los Angeles. At both programs, you'll create a vibrant social experience for kids who are discovering for the first time that there are other people who like doing mathematics; you'll also be a TA for classes on topics such as number theory, combinatorics, problem solving, and computer science. At our residential program, counselors will also live with the students in the campus dorms. Be a role model and guide for students who are just beginning to set their educational path!

Counselors must be strong mathematically, be reliable, and take initiative. They should be charismatic and able to help the kids have fun. All counselors must be at least 18 years old by July 8, 2018 (if applying for LA positions, June 18, 2018).

Residential Program:

Compensation: \$2,600 for four weeks, plus room, board, and a transportation stipend.

Locations: Bard College, Union College

Dates: July 5 to August 1, 2018

Non-residential Program:

Compensation: \$3,600 for six weeks, breakfast/lunch on weekdays, an unlimited MetroCard at the NYC program

Location: New York City, Los Angeles

LA Dates: June 11 to July 24, 2018

NYC Dates: July 2 to August 14, 2018

Deadline: rolling, but please apply by February 12, 2018 for full consideration.

For more information and to apply: <https://www.beammath.org/counselor-info/>

Bridge to Enter Advanced Mathematics: Summer Faculty Positions (for teachers, professors, and professionals able to work during the summer)

This summer, change the lives of talented middle school students from underserved backgrounds: teach them what mathematics really is. Bridge to Enter Advanced Mathematics (BEAM), a project of the Art of Problem Solving Initiative, Inc., is seeking instructors for a program that gives everyone a chance to excel in mathematics. Faculty design and teach their own courses to bright, underserved middle school students. During summer 2018, we will run residential programs at Bard College and Union College in the Hudson Valley, and day programs in New York City and Los Angeles.

Residential Program (BEAM 7):

Compensation: \$5,000 for four weeks (or \$3,300 for junior faculty such as graduate students or early-career teachers), plus room, board, and a transportation stipend.

Location: Bard College and Union College, both located about 2 hours out of NYC. Our students, all from high-poverty New York City public schools, will be discovering a new environment in these idyllic settings.

Dates: July 5 to August 1, 2018

Courses at BEAM 7 can be:

Pure math such as number theory, combinatorics, graph theory, or logic; **Applied math** such as circuit design, programming, astrophysics, or genetics; or **Problem solving**, either Math Team Strategies or Solving Big Problems.

Non-residential Program:

Compensation: \$2,400-\$5,600 for six weeks depending on course load (part-time positions available).

Location: New York City or Los Angeles

LA Dates: June 13 to July 24, 2018

NYC Dates: July 3 to August 14, 2018

BEAM 6 teachers receive outlines to help plan courses in **Logical Reasoning**, **Math Team Strategies**, **Math Fundamentals**, or **Applied Math**, and we are flexible for many different courses that meet our learning goals.

For both:

Ideal candidates include college or university professors (as well as graduate students) with strong teaching backgrounds, and middle or high school teachers with strong mathematics backgrounds. We've found that the community of teachers that we create, bringing together instructors from across many different academic areas, is one of the program's strengths and provides a great experience for all participants.

Good candidates will work well on a close-knit team and will be able to bring unique curriculum perspectives to the program. Experience with other extracurricular outreach programs (such as math summer programs or math circles, MATHCOUNTS, programming workshops, or similar) are also a plus. We will provide mentorship, textbooks, and other resources as needed.

This is a unique opportunity to influence the lives of young students. Our students have tremendous potential and a strong ability for abstract reasoning, but because of their schools and backgrounds they often have not had the same training as more affluent peers. They are devoted, doing many hours of math each day (and loving it). We hope that you will join us (and them)!

For more information and the application, contact us at info@beammath.org or visit our website at www.beammath.org.

Mathematicians of Color Alliance (MOCA) Network Workshop

The Mathematicians of Color Alliance(MOCA) Network will be hosting a one week workshop for mathematicians of color to collaborate with a secondary mathematics teacher in their local community.

Mathematicians will share their expertise, experiences, and time with mathematics teachers in an effort to provide new perspectives, opportunities, and access to the teachers and their students of color.

The workshop will take place at Iowa State University (Ames, IA) on **August 6-10, 2018**. Participants will receive funding for travel and a stipend in the amount of \$1000 for participating in the workshop and periodic school-based collaborations. An application consists of a CV, personal statement, and completing a survey. The survey will be sent to applicants after the apply on MathPrograms. Postdoc, graduate students, and mathematicians in business, industry, or government are encouraged to apply also.

The Mathematicians of Color Alliance(MOCA) Network, is a network whose mission it is to create substantial and transformative relationships with students of color and their teachers in the school setting. The MOCA Network's goals include collaborating with teachers to develop and implement engaging mathematics with students of color in order to provide access to greater opportunities and to ensure these students are able to develop productive relationships with mathematics as a field that is welcoming and exhilarating.

[Apply Here](#)

This workshop is funded by NSF Includes Grant [#1744463](#)

Postbaccalaureate Certificate in Mathematics at Iowa State University

The [Department of Mathematics](#) at [Iowa State University](#) will be offering a Postbaccalaureate Certificate in Mathematics during the 2018-2019 academic year, pending funding approval.

The Postbaccalaureate Certificate in Mathematics is a certificate program that offers students who have received Bachelor's degrees a year of training and preparation for entering a PhD program. The main goal of the program is to prepare students to be successful in graduate studies in mathematics and to experience graduate school.

In this program students will take 4 courses, have teaching assignments in undergraduate courses, get ample mentoring from the department's faculty and graduate students, attend conferences, and receive professional development to aid in applying for graduate programs (or jobs, if necessary).

Applicants must submit an application, transcripts, a personal statement, and at least 2 letters of recommendation. Underrepresented minorities, women, veterans, and nontraditional students who want to go back to school are encouraged to apply.

Learn more at www.mathpostbac.org and apply online at <https://www.mathprograms.org/db/programs/662>.

The review of applications will start on March 9 and will continue until all slots are filled. Contact Michael Young (myoung@iastate.edu) or Bernard Lidicky (lidicky@iastate.edu) with any questions.

Mathematical Sciences Research Institute Spring Workshops, 2018



Mathematical Sciences Research Institute Spring Workshops, 2018 Berkeley, CA

The Mathematical Sciences Research Institute (MSRI) will hold the following workshops during the Spring of 2018. Established researchers, postdoctoral fellows and graduate students are invited to apply for funding. It is the policy of MSRI to actively seek to achieve diversity in its workshops. Thus, a strong effort is made to remove barriers that hinder equal opportunity, particularly for those groups that have been historically underrepresented in the mathematical sciences.

March 12, 2018 - March 16, 2018

Hot Topics: The Homological Conjectures: Resolved!

<http://www.msri.org/workshops/842>

March 19, 2018 - March 23, 2018

Structures in Enumerative Geometry

<http://www.msri.org/workshops/816>

April 09, 2018 - April 13, 2018

Representations of Finite and Algebraic Groups

<http://www.msri.org/workshops/820>

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.

Launch the NExT stage of your career!

MAA Project NExT (New Experiences in Teaching) is a year-long professional development program of the *Mathematical Association of America* (MAA) for new or recent Ph.D.s in the mathematical sciences. The program is designed to connect new faculty with master 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



MAA Project NExT Fellows join an active community of faculty who have gone on to 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 Ph.D.s in postdoctoral, tenure-track, and visiting positions. We particularly encourage applicants from under-represented groups (including women and minorities). Applications for the 2018 cohort of MAA Project NExT Fellows are due on **April 15, 2018** and can be found at projectnext.maa.org

Medgar Evers College, CUNY Tenure-Track

The Mathematics Department at Medgar Evers College, CUNY invites applications for a tenure track position in Mathematics (Statistics) at the rank of Assistant Professor. We seek a dynamic candidate with a strong background in both mathematics and statistics interested in contributing to the development of a nationally relevant program in mathematics focused on diversity and equity. A primary responsibility for this position will include contributing to the development of a new undergraduate program in statistics along with innovative courses that can be offered across the academic units at the college. The responsibilities of the position will also include maintaining an active research agenda, teaching courses in mathematics and statistics, advising undergraduate students, directing undergraduate research projects, and other duties as assigned by the Department.

Named for the famed civil rights activist Medgar Wiley Evers, Medgar Evers College is a senior college of the City University of New York. The College is located in the vibrant Crown Heights section of Central Brooklyn. The College and the Mathematics Department are committed to building and sustaining a culturally diverse faculty, staff, and student body. MEC is an institution in which excellence in teaching and research is highly valued.

Qualifications:

Candidates should have an earned doctorate in Mathematics, Statistics, or a related field and a strong commitment to inclusive excellence and demonstrated experience working with diverse populations. The candidate should have a promising record of scholarship, teaching and community engagement. The preferred candidate will have, in addition, an established or emerging interest in college access and preparation in mathematics, innovative instructional technologies, development and support of community partnerships, faculty professional development, and matters related to the retention and persistence in mathematics for students of color and students living in poverty. I.e., the successful candidate should have a strong interest in connecting mathematics education across P-20 settings and in working with community stakeholders.

[CLICK TO APPLY](#)

CLOSING DATE: Open until filled

Conference Announcement

Summer school and conference:

"Interactions of quantum affine algebras with cluster algebras, current algebras and categorification", in honor of Vyjayanthi Chari's 60th birthday.

Registration is now open (see <https://quantumaffine2018.catholic.edu/>).

We would greatly appreciate if you could circulate the news/website with any of your colleagues, students and postdocs interested in representation theory.

The conference is partially funded by the NSF and some travel support will be available for participants, with the priority given to graduate students, post-docs and junior faculty with limited access to research funding. Women and persons from group which are underrepresented in mathematical sciences are particularly encouraged to apply.

The deadline for funding applications is April, 15th. Funding decisions will be made by April 30th.

The conference "Interactions of quantum affine algebras with cluster algebras, current algebras and categorification" will take place at the Catholic University of America in Washington, DC on June 2-8, 2018. The conference will focus on problems related to, or motivated by, representations of infinite dimensional Lie algebras and their quantum analogues. The recent rapid growth, rising prominence, and emerging connections between these topics underscores the timely need for a conference that focuses on new connections by bringing together leading researchers who work on different aspects of these subjects.

A main goal of the conference is to expose graduate students and early-career researchers to recent developments in representation theory. In an effort to foster their interest and engagement, the four day conference will be preceded by a three day summer school/workshop for junior researchers. Infinite- dimensional Lie algebras and their quantum analogues play a prominent role in mathematics and mathematical physics. In recent decades their representation theory has been connected with a number of different subjects, such as algebraic geometry, algebraic topology, combinatorics and cluster algebras, to name but a few. The talks will focus on topics such as crystal and canonical bases, Weyl, Demazure and Kirillov-Reshetikhin modules and interaction between them, highest weight categories, Khovanov-Lauda-Rouquier algebras and their applications to categorification, cluster algebras and related structures, geometric methods in infinite dimensional representation theory (in particular, the role of quiver varieties), and map algebras. A special emphasis will be placed on interactions between various structures.

Further details can be found at <https://quantumaffine2018.catholic.edu>