

# Math Alliance News

June 2017 -Jolume 5. Issue 6

### **Upcoming Events**

## Center for the National Math Alliance created in Purdue College of Science

## **SACNAS Leadership Inst.** Washington, DC July 17-21, 2017

#### **MAA MATHFEST**

Hilton Chicago, IL July 26-29, 2017

## **Diversity Mentoring Program** at JSM 2017

Baltimore, MD July 30, 2017- August 2, 2017

### StatFest 2017

Emory University September 23, 2017

#### **2017 FOD Conference**

Renaissance St. Louis Airport November 3-5, 2017 The Math Alliance has a new administrative home at Purdue University – the newly created College of Science Center for the National Math Alliance. The creation of the Center was approved by Interim Dean, Craig Svennson, and will provide the Alliance with administrative support and financial stability. As a unit within the Center, the Alliance will continue to operate as an independent organization in terms of its programs and activities.

The governing document for the Center is now posted at the Alliance website.

We will be providing more information soon about the operational structure of the Center, and how individuals and Departments can participate.

## Now Accepting Nominations for the 2017-18 F-GAP Program



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. FGAP 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 are now accepting nominations for the 2017-18 F-GAP program. If you know of a senior or Master's student who will be graduating in the Spring of 2018 and will be applying to graduate programs for Fall 2018 please submit a form here: https://mathalliance.org/2017-fgap-nomination-form/ to nominate students.

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.

"F-GAP has substantially helped me in finding the right programs to which I should apply."



"The F-GAP program is excellent! My facilitator assisted and encouraged me at every stage of the application process."



"The attention and help that I receive of my F-GAP facilitator was outstanding. The tips given by him to improve my Personal Statement, CV and others application materials were phenomenal."



## **StatFest 2017 at Emory University**



StatFest is a one day conference aimed at encouraging undergraduate students from historically underrepresented groups to consider careers and graduate studies in the statistical sciences. The conference is an ongoing initiative of the American Statistical Association through its Committee on Minorities in Statistics.

StatFest includes presentations from established professionals, academic leaders, and current graduate students that will help attendees understand the opportunities and routes for success in the field. Panel forums provide information and tips for a rewarding graduate student experience, achieving success as an academic statistician, opportunities in the private and

government arenas, among other topics.

We are excited that StatFest 2017 will be held in Atlanta, Georgia at Emory University, one of the world's leading research universities ranked as one of the top 20 universities in the United States of America. The conference is hosted by the Department of Biostatistics and Bioinformatics at the Rollins School of Public Health.

While the conference is free, registration is required (see the link at <a href="http://tinyurl.com/statfest">http://tinyurl.com/statfest</a> to register or for more information).

Contact Renee' Moore at <u>renee.moore@emory.edu</u> or Jesse Chittams at <u>chittams@nursing.upenn.edu</u> with questions or for information regarding sponsorship.

### **September 23, 2017**

Emory University Rollins School of Public Health Department of Biostatistics and Bioinformatics Claudia Nance Rollins Building

## **STEM Faculty Launch Program at WPI**

This is a program aimed at underrepresented minorities in STEM fields, where finishing doctoral students and postdocs from institutions all across the US (and some abroad) come to WPI for a 3 day intensive training on how to apply for academic STEM jobs, and how to prepare for becoming future faculty. For more details please see the link http://www.wpi.edu/+facultylaunch.

This is the third year we launch this program. In the last two years it was a success, with over 30 participants each time (this year we aim at a slightly larger group). In particular we had over 11 participants from mathematics departments.

**TO APPLY:** Applications for the 2017 STEM Faculty Launch program are due <u>August 11, 2017</u>. **Please visit our** <u>application site</u> to apply.



## **SAMSI QMC Workshop**

#### SAMSI QMC Opening Workshop, 8/28–9/01/2017 Penn Pavilion at Duke University, Durham, NC

The Opening Workshop marks the official start of the 2017-18 SAMSI Program on Quasi-Monte Carlo and High-Dimensional Sampling Methods for Applied Mathematics. The first workshop day consists of tutorials that introduce QMC methods, followed by a poster reception. The remaining days feature research presentations, discussion panels, and the formation of (virtual) research working groups.

#### Workshop topics:

High-dimensional numerical integration and approximation; low discrepancy and other high-dimensional sampling schemes; information-based complexity;

partial differential equations (high-dimensional, random coefficients); digital nets, lattice rules, and their randomization; as well as applications of QMC to: uncertainty quantification, stochastic wave propagation, Bayesian computations, and industrial problems.

#### **Organizers:**

Art Owen (Stanford), Frances Kuo (New South Wales), Fred Hickernell (Illinois), Pierre L'Ecuyer (Montréal)

#### **Directorate Liaison:**

Ilse Ipsen, Associate Director of SAMSI

More information is available at: http://samsi.us11.list-manage.com/track/click?u=f8d81ec133891cc606c5dc3af&id=393be6980b&e=873e5bd3a2 Send questions to: <a href="mailto:qmc@samsi.info">qmc@samsi.info</a>

### Applications are now being accepted at

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## **SAMSI Opening Workshop**

Climate Program Opening Workshop: August 21 – 25, 2017 \*\*Deadline for applications is July 6, 2017

For information: http://samsi.us11.list-manage.com/track/clicku=f8d81ec133891cc606c5dc3af&id=ff57b47981&e=873e5bd3a2

Location: The Hamner Conference Center/NC Biotech Center in Research Triangle Park, NC.

This workshop serves to introduce the activity of the entire SAMSI program that will last from August 2017 through May 2018. There will be overview lectures by leading scientists in the field, a series of sessions of research talks and round table discussions, discussions and initial meetings of Working Groups, and a short course on computational methods. The opening day (August 21) will consist of five Overview Lectures designed to highlight major areas of climate science for which there is a need for input from mathematicians and statisticians. Speakers and summary titles are: Vipin Kumar (University of Minnesota): Climate Informatics

Kristie Ebi (University of Washington): Climate and Health

Leonard Smith (London School of Economics): Climate Prediction

Bill Collins (Lawrence Berkeley National Lab): Mathematical Challenges in Climate Modeling

Ken Kunkel (NOAA): Climate Datasets

#### **Program Leaders:**

Amy Braverman, Jet Propulsion Laboratory/Caltech Peter Challenor, University of Exeter Christopher Jones, UNC Doug Nychka, NCAR Brian Reich, NCSU Michael Wehner, Lawrence Berkeley National Laboratory Mary Lou Zeeman, Bowdoin College

#### **SAMSI Directorate Liaison:**

Richard Smith (UNC-Chapel Hill) Questions: email climate@samsi.info

## "Hidden Figures" Panel Discussion at the SIAM Annual Meeting

The 2017 SIAM Annual Meeting will take place from July 10-14 in Pittsburgh, PA. This year, there will be a panel discussion on "Hidden Figures" featuring Carla Cotwright-Williams (Social Security Administration), Christine Darden (NASA, Retired), Erica J. Graham (Bryn Mawr College), Talitha Washington (Howard University), and Shelby Wilson (Morehouse College). It will take place on Tuesday, July 11 from 7:00 PM - 8:00 PM in Room 406 of the David Lawrence Convention Center.

This event is sponsored by the Association for Women in Mathematics (AWM), Building Diversity in Science (BDIS)/Infinite Possibilities Conference (IPC), Enhancing Diversity in Graduate Education (EDGE), IBM, National Association of Mathematicians (NAM), and the Society for Industrial and Applied Mathematics (SIAM).

For more information: <a href="http://meetings.siam.org/sess/dsp">http://meetings.siam.org/sess/dsp</a> programsess.cfm?SESSIONCODE=62816

## **MAA-NAM David Blackwell Lecture**

The 2017 MAA-NAM David Blackwell Lecture will be given by Rudy Horne (Morehouse College) on Friday, July 28 at MAA MathFest in Chicago, IL.

The title of his talk is "Hidden Figures: My Role as a Math Consultant for this Film". It will take place from 1:00 PM - 1:50 PM in the International Ballroom South in the Hilton Chicago (720 South Michigan Avenue).

This event is sponsored by the National Association of Mathematicians (NAM).

For more information: http://nam-math.org/blackwell-lecture.html

## **NAM Undergraduate MATHFest**

The 2017 Undergraduate MATHFest will be held Friday, September 29 - Sunday, October 1 at Medgar Evers College in Brooklyn, NY.

Edray Goins (Purdue University) and Terrence Blackman (Medgar Evers College) are the organizers.

This event is sponsored by the National Association of Mathematicians (NAM).

For more information: http://nam-math.org/mathfest.html.

If you have any questions, please send an e-mail to <ehgoins@mac.com>.

## Statistics tenure-track position at Amherst College

Amherst College invites applications for a tenure-track position in statistics with an appointment to begin July 1, 2018. Within the last decade, Amherst College has profoundly transformed its student body in terms of socioeconomic status, ethnicity, and nationality, among other areas. Today, nearly one-quarter of Amherst's students are Pell Grant recipients; 44 percent of our students are domestic students of color. Amherst College is an equal opportunity employer and encourages women, persons of color, and persons with disabilities to apply. The college is committed to enriching its educational experience and its culture through the diversity of its faculty, administration, and staff. Our expectation is that the successful candidate will excel at teaching and mentoring students who are broadly diverse with regard to race, ethnicity, socioeconomic status, gender, nationality, sexual orientation, and religion.

Responsibilities include teaching two courses per semester, supervising undergraduate theses and comprehensive projects, and supporting the growing statistics program at the college. Applicants must hold a Ph.D. in statistics, biostatistics, data science or a related field, have broad intellectual interests and a strong commitment to research, and be passionate about teaching statistics to undergraduates at all levels. We seek colleagues actively engaged in research who can teach a wide range of courses and help foster the statistics and data science community at Amherst.

Submit cover letter, curriculum vitae, research statement, teaching statement, and at least three letters of recommendation (including at least one that specifically addresses teaching) to MathJobs.Org. Applications will be accepted until the position is filled, but all applications received by October 8, 2017, will be guaranteed consideration. See <a href="https://www.amherst.edu/academiclife/dean\_faculty/faculty\_hiring/employment">https://www.amherst.edu/academiclife/dean\_faculty/faculty\_hiring/employment</a> for details of the position, and <a href="https://www.amherst.edu/academiclife/departments/mathematics-statistics/">https://www.amherst.edu/academiclife/departments/mathematics-statistics/</a> for details about the department. Questions can be addressed to <a href="mathematics-statistics/">mathstats@amherst.edu</a>.

Amherst College is a private undergraduate liberal arts college for women and men, with 1,800 students and more than 200 faculty members. Located in the Connecticut River Valley of western Massachusetts, Amherst participates with Hampshire, Mount Holyoke, and Smith Colleges and the University of Massachusetts in the Five-College Consortium. The Five College Statistics Program (established in 2011) actively fosters connections among the many statisticians and data scientists in the area. <a href="https://www.mathjobs.org/jobs/jobs/10350">https://www.mathjobs.org/jobs/jobs/10350</a>

## North Carolina State University -Bridge to the PhD Program

### Data-Enabled Science and Engineering of Atomic Structure (SEAS) North Carolina Central University— North Carolina State University Bridge to the PhD

The SEAS Bridge to the PhD is a unique, interdisciplinary program designed to increase the quantity and quality of students of underserved populations who complete doctoral degrees in the physical sciences, engineering, and mathematics disciplines. This program focuses on the application of advanced statistical methods to data generated from cutting-edge analytical and computational experiments. Students pursuing a Master's of Science (MS) degree at NCCU receive dual credit towards a PhD at NC State, engage in scientific research, co-advised by NCCU and NC State faculty, build a network of peers and faculty, receive financial assistance between \$10,000 and \$34,000 for up to two years, develop skills to successfully achieve a PhD, and enhance their career opportunities.

#### **Interested students must:**

- Be accepted into a MS program at NCCU in a physical science or mathematics discipline <a href="http://www.nccu.edu/academics/sc/graduatestudies/">http://www.nccu.edu/academics/sc/graduatestudies/</a> (Deadline July 1, 2017)
- Demonstrate a strong desire to pursue a PhD
- Be willing to commit to all program requirements
- Contact SEAS Coordinator to be considered

Contact: Dr. Ashleigh R. Wright, Coordinator seas graduate nrt@ncsu.edu https://research.mse.ncsu.edu/seas

## **Summer Cryptology Instructor Opportunities**

The Johns Hopkins University Center for Talented Youth (CTY) is seeking applicants interested in summer employment as a Cryptology Instructor. Positions are available in Los Angeles, CA (Loyola Marymount University) and Lancaster, PA (Franklin & Marshall College). CTY offers challenging summer academic programs for middle and high school students from across the country and around the world. More information regarding our summer programs can be found at <a href="https://www.cty.jhu.edu/summer">www.cty.jhu.edu/summer</a>.

#### Why teach for CTY?

- •share your passion for mathematics with highly motivated and talented students
- •be a part of an intellectual community
- •teach in a supportive, collegial environment
- •work alongside dedicated educators from around the world
- •limited class size (15 students), plus an instructor and assistant for each class, ensures a low student-teacher ratio
- •competitive salary plus room and board

#### Cryptology

In this math course, students begin their journey with an exploration of many early techniques for creating secret writing, such as cipher wheels, the Caesar shift, monoalphabetic substitution, and the Vigenère cipher. They move on to learn about modern

techniques including RSA public key cryptography. Delving deeper into modern techniques, students explore how data transmitted by computer can be secured with digital encryption.

#### Salary

First-year CTY instructor salary ranges from \$4800 to \$6000 for two three-week sessions, plus room and board on campus. **Location and dates** (instructors can work one or both sessions)

- •Los Angeles, CA (Loyola Marymount University) Session 1 (June 22 July 15) and Session 2 (July 15 August 5).
- •Lancaster, PA (Franklin & Marshall College) Session 1 (June 22 July 15 and Session 2 (July 15 August 5). To apply:

Please fill out an application at: <a href="www.cty.jhu.edu/jobs/summer">www.cty.jhu.edu/jobs/summer</a>. Please email inquiries directly to Frannie Worek at fworek@jhu.edu.

## **Assistant Professor of Mathematics opening at The Ohio State University at Marion**

The Ohio State University at Marion invites applications for 1 to 2 full-time tenure track Assistant Professor positions in the Department of Mathematics to begin in Autumn 2018. Candidates must have a Ph.D. in hand at the time of appointment; postgraduate teaching experience is preferred. Candidates must have a strong commitment to teaching and research.

Teaching and service for this position will occur primarily at The Ohio State University at Marion, which is one of the six campuses of The Ohio State University and is located 45 miles north of the central campus in Columbus. Tenure track faculty on the Marion campus hold appointments in their academic departments on the Columbus campus and have access to relevant labs, libraries, and resources there.

We seek candidates with diverse teaching expertise who will teach students of varying abilities. Responsibilities will include teaching math courses (at the preparatory, first, and second-year level), research and publication, and service to the campus, university, and discipline. Candidates are expected to have a strong research program and advise graduate students at the Columbus campus. Candidates should submit a detailed cover letter, a statement of teaching philosophy and experience and a statement of research interests, experience, and future plans. Also, included should be current Curriculum Vitae, graduate transcripts, quantitative and/or discursive teaching evaluations, and three current letters of reference (at least one of which should address teaching ability and experience).

Electronic submissions are encouraged and should be sent to: mrnmath@osu.edu, or send application materials to: Math Faculty Search
The Ohio State University at Marion

Human Resource Office

1461 Mt. Vernon Ave.

Marion, OH, 43302

Application review begins September 30 and continues until the position is filled. Completed applications arriving by September 30, 2017 will receive priority. The university requires successful completion of a background check.