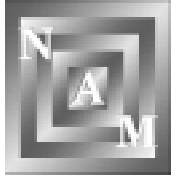


national association of mathematicians



volume xxxii

number 1

spring 2001

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IN THE NEWS

1. Clinton awards Shabazz the Presidential Award for Excellence. For more see the article inside.
2. First African American Women. As reported in the Washington Post, on BET television, and in the Chronicle of Higher Education, the University of Maryland in 2000 awarded its first Ph.D. to an African American woman – actually to three of them, Tasha Inniss, Sherry Scott, and Kimberley Weems. All three spoke in NAM's Granville-Browne Presentations by Recent Doctoral Recipients in the Mathematical Sciences. For more see the article inside.
3. Ford Foundation Minority Fellowships. Nandi Olive Leslie of Princeton University and Erica Tatiana Wirkus of Cornell University were awarded the 2000 Pre-doctoral Ford Foundation Minority Fellowships. The fellowships are administered by the National Research Council.
4. Mathematics For Teaching. What can be done to improve the undergraduate education of prospective high school mathematics teachers? The author discusses current problems, potential solutions, and some examples of successful efforts. The article appears in the February 2001 issue of The Notices of the AMS, it can be read for free online at <www.ams.org/notices/>.
5. USA Today "Best Bet". USA Today chose Mathematicians of the African Diaspora <www.math.buffalo.edu/mad/mad0.html> as one of its best education selections of 2001. Fewer than 150 sites are selected each year as USA TODAY Education "Best Bet" Web sites. From February 20-25 the "Best Bet" link appeared on the USA TODAY Education Web site <education.usatoday.com/>. In its 5 years of existence, M.A.D. has had 500,000 visitors and won eight similar awards from, for example, Science (2000), the New York Times (2000), and the Chronicle of Higher Education (1998).
6. Board Members in National Mathematics Organizations. Dr. Nathaniel Dean, NAM Vice President, is an Associate Editor of the Notices of the AMS. Dr. Jacqueline Giles, NAM Community College Representative, has been invited to serve on an ad hoc Committee on MAA Elections.
7. NAM MathFest XI October 4,5,6, 2001 held at Florida A & M State University in Tallahassee Florida. Application deadline May 1, 2001. More information and applications for support are inside.

THE PRESIDENT'S PERSPECTIVE

*by John (Jack) W. Alexander, Jr,
President NAM*

What A Difference a Dimension Makes

Our intuition is not nearly as good as we sometimes think it is. This is particularly true when we try to make estimations dealing with different dimensions (linear-one dimension, square-two dimensions, cubic-three dimension) without the use of mathematics. Consider the three questions below. How good or bad is your intuition?.

If every person in the world were to hold hands, are there enough people to reach around the earth at the equator. Take a guess before reading on.

Solution: There are approximately 6 billion people in the world at the present time. Since we include big people as well as little, let us assume that the average arm span for a person is 4 feet. Given this assumption, the length of people is about $6 \text{ billion} \times 4 = 24 \text{ billion}$ feet. Since one mile is equal to 5280 feet, the length of people in miles is $24 \text{ billion} / 5280 = 4,545,454.5$ miles. The circumference of the earth at the equator is about 24,000 miles. This means that the length of people is much longer. In fact, the people (holding hands) would wrap around the earth $4,545,454.5 / 24,000 = 189.4$ times. Would you have guessed such a large number?

Now consider a two-dimensional example. Is continental United States large enough for the 6 billion people to stand inside the borders?

Solution: Lets us again begin with a defensible assumption. In this case, we will assume that each person will require an area 2 feet by 1 foot or 2 square feet

per person. Using the 6 billion again as the number of people, this implies that we need $2 \times 6 \text{ billion} = 12 \text{ billion}$ square feet for all of the people. In a square mile, there are $52,802 = 27,878,400$ square feet. Now, $12 \text{ billion} / 27,878,400 = 430.4$. This means that all of the people in the world could stand inside an area of a little more than 430 square miles. Now, a small state like Massachusetts has 8,257 square miles; Connecticut has 5,009 square miles; and Rhode Island has 1,214. Clearly all people could stand in the United States. In fact, all could stand in Rhode Island about 2.8 times. Again, would you have guessed this result? Note that all those people who would wrap around the earth 189 times could stand in an area smaller than the state of Rhode island.

Lastly, we consider a three-dimensional example. If the world population were packed into a cube, how large would the side of the cube have to be?

Solution: In this case we will assume that each person is allocated 2 feet by 1 foot by 4 feet; i.e. 8 cubic feet. Therefore, the volume of people would be $6 \text{ billion} \times 8 = 48 \text{ billion}$ cubic feet. Hence, the side of the cube that would hold all the folks is simply the cube root of this number. The result is 3634.2 feet. In other words, all of the people in the world could fit into a cube whose side is approximately 7 tenths of a mile.

CALENDAR

- * NAM Regional Conference for Excellence in Teaching and Research at Xavier University in New Orleans March 19-21
- * June 19-22, 2001, CAARMS7 at Duke University, organizers: William A. Massey and Arlie O. Petters, sponsors: Duke University, Morgan State University and the National Security Agency
- * July 9-13, 2001 SIAM Annual Meeting (Diversity Day), Town & Country Hotel, San Diego, CA
- * October 4,5,6, 2001 NAM MathFest XI, Florida A&M State University, Tallahassee, Florida
- * January 6-9, 2002, Joint Meetings NAM, AMS, MAA in San Diego 2002, San Diego Convention Center
- * July 8-12, 2002, SIAM 50th Anniversary & Annual Meeting, Philadelphia, Marriott Hotel, Philadelphia, PA (Diversity Day)

POSTER OF AFRICAN AMERICAN PIONEERS IN MATHEMATICS

The posters of African American Pioneers in Mathematics are now available again. Send donations of \$5.00 for shipping and handling to:

SUMMA – NAM Poster
Department of Mathematics
Morgan State University
Baltimore, MD 21251

THE GRANVILLE-BROWNE SESSION OF PRESENTATIONS BY RECENT DOCTORAL RECIPIENTS IN THE MATHEMATICAL SCIENCES

Doctoral Recipients with Massey. photo by Jacqueline Giles



According to the AMS Annual Survey of the Mathematical Sciences there were 1119 Ph.D.'s awarded in the Mathematical Sciences in the year 2000. Of these 20 were Black. On January 12, 2001 at the Joint Mathematics Meetings, New Orleans, Louisiana, the National Association of Mathematicians (NAM) hosted the Granville-Browne session of presentations by recent doctoral recipients in the mathematical sciences at the Joint Mathematics Meetings held this year in New Orleans, Louisiana. These presentations serve as a forum to showcase the achievements of new African American researchers in the mathematical sciences. The session was organized and moderated by Dr. William A. Massey of Bell Laboratories, Lucent Technologies. The speakers were Serge Bernard, Shea Burns, Gelonia Dent, Illya V. Hicks, Tasha R. Inniss, Otis B. Jennings, Sherry Scott, and Kimberly Weems.

A program with abstracts for the session can be downloaded online at <http://cm.bell-labs.com/who/will/newphd01.html> where there are complete slides for each talk.

Below we have photos of each speaker with their name, current affiliation, the title of their talk and biographical information. Photos by William Massey.

Serge Bernard of University of Maryland College Park "A Multivariate EWMA Approach to Monitor Process Dispersion."

Dr. Bernard was born and raised in Haiti. He received his undergraduate degree in Mathematics with a minor in Operations Research from Polytechnic University, Brooklyn NY, a M.A. and Ph.D. (2000) in Applied Mathematics (Statistics and Operations Research concentration) from the University of Maryland at College Park. His area of research is Multivariate Quality Control. *See picture 1.*

e-mail: sbernard@math.umd

Shea Burns of North Carolina A&T State University "Disjoint Smallest Ideals in the Two Natural Products on bS."

Dr. Burns was born and raised in Washington, DC. She received an undergraduate degree from North Carolina A & T State University in Mathematics and a Ph.D. in Mathematics from Howard University. Her area of specialty is in Topological Semigroups. *See picture 2.*

e-mail: sburns@ncat.edu



Picture 1



Picture 2



Picture 3



Picture 4



Picture 5

Gelonia Dent of the IBM T. J. Watson Research Center – Yorktown "Higher Order Representations for Particles Settling in a Periodic Lattice".

Dr. Dent was born New Orleans, Louisiana and raised in Atlanta, Georgia. She received her B.S. in mathematics from the University of Georgia at Athens. She then received a Masters degree in mathematics from Clark Atlanta University and finally a Ph.D. in applied mathematics from Brown University's Division of Applied Mathematics in May 1999. Her area of research is fluid dynamics. Her work focuses on the simulation of dispersed two phase flows and she is interested in applications to bio-fluids and mathematical finance. She is a research staff member in the Numerical Analysis Group at the IBM T.J. Watson Research Center in Yorktown Heights, NY. *See picture 3.*

e-mail: gdent@us.ibm.com



Picture 6

Illya V. Hicks of Texas A&M University "Graph Minors and Branch Decompositions"

Dr. Hicks was born and raised in Waco, Texas. He received his undergraduate degree in Mathematics from Southwest Texas State University where he was a member of the varsity football team. While in the graduate mathematics program of Rice University, Illya received an AT&T Labs fellowship, which was formerly a part of the Bell Labs Cooperative Research Fellowship Program for minorities. Illya received his Ph.D. (2000) in Computational and Applied Mathematics Department at Rice University, and is currently an assistant professor in the Industrial Engineering Department at Texas A&M University. His research interests are in combinatorial optimization, operations research, graph theory, and integer programming. *See picture 4.*

e-mail: ivhicks@ie.tamu.edu



Picture 7

Tasha R. Inniss of Trinity College (Washington DC) "Stochastic Models for the Estimation of Airport Arrival Capacity Distributions."

Dr. Inniss was born in New Orleans, Louisiana. She has a BS in Mathematics (summa cum laude) from Xavier University of Louisiana, a MS in Applied Mathematics with a concentration in topology from the Georgia Institute of Technology, and a Ph.D. (2000) in Applied Mathematics from the University of Maryland. *See picture 5.*

e-mail: InnissT@trinitydc.edu



Picture 8

Otis B. Jennings of Stanford University "Stabilizing Queueing Networks with Setup Delays".

Dr. Jennings was born and raised in Dallas, Texas. He has a BSE in Civil Engineering and Operations Research from Princeton University. He was awarded a Bell Labs Cooperative Research Fellowship from Lucent Technologies and received a Ph.D. in Industrial & Systems Engineering from the Georgia Institute of Technology. He currently holds a postdoctoral position at the Stanford Graduate Business School. *See picture 6.*

e-mail: Jennings_Otis@gsb.stanford.edu

Sherry Scott of George Washington University "Spectral Analysis of Fractal Noise in terms of Wiener's Generalized Harmonic Analysis and Wavelet Theory".

Dr. Scott was born in Rome, GA and raised both there and in Ohio. She has a Bachelor of Science in Mathematics from the Ohio State University and a Ph.D. (2000) in mathematics from the University of Maryland, College Park. Her fields of interest include harmonic analysis and wavelet theory. *See picture 7.*

e-mail: sscott@gwu.edu

Kimberly Weems of the National Security Agency Robust Estimation in Mixed Poisson Regression Models with Perturbed Random-Effects Distributions."

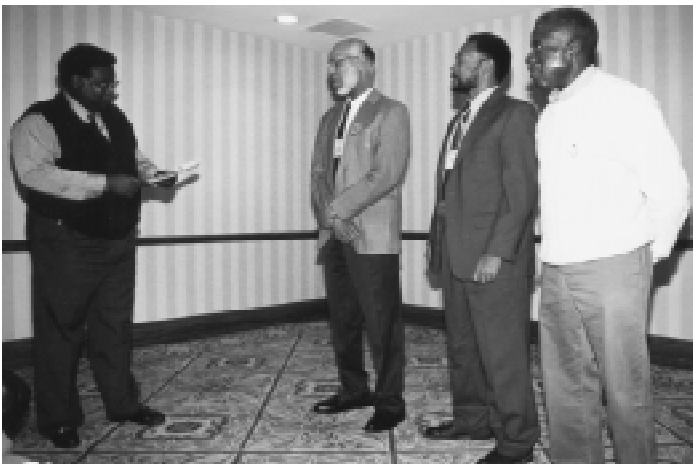
Dr. Weems was born and raised in Cartersville, Georgia. She received her B.S. in mathematics from Spelman College and both her M.A and Ph.D. (2000) from the University of Maryland, College Park. Her graduate work was supported by a fellowship from the National Physical Science Consortium and the National Security Agency. Her research interests include generalized linear mixed models, longitudinal data analysis, and robust statistics. *See picture 8.*

e-mail: kswmath.umd.edu

FROM THE NAM BOARD OF DIRECTORS

by R. E. Bozeman, Secretary/Treasurer

The Board of Directors of the National Association of Mathematicians held its first meeting for the new year on January 11, 2001 in New Orleans, Louisiana. All official members of the Board were present as well as ex-officio member and past President Rogers Newman. As a result of NAM's most recent elections three new members were added to the NAM Board. Earl Barnes from the Georgia Institute of Technology was elected as the Majority Institution Representative; William Hawkins of the University of the District of Columbia was elected as the new Region B Coordinator; and Nathaniel Dean of Rice University was elected as Vice President. These three persons were introduced and welcomed to the Board by President John Alexander.



Bozeman inducts Hawkins, Dean, and Barnes (l.-r.) photo by Jacqueline Giles

Most of the Board meeting focused on the programs scheduled for the New Orleans meeting. Reports were received on the Granville-Brown Session, NAM Panel Discussion, Cox-Talbot Address and Banquet, General Business Meeting and the William W.S. Claytor Lecture. The Executive secretary, Leon Woodson, reported on new grants coming to NAM. The Andrew Mellon Foundation awarded NAM \$ 150,000 to support the Undergraduate Mathfest for three years. An award of \$ 75,000 was received from the Department of Energy to support NAM's Spring Regional Faculty Conferences.

Congratulations were extended to NAM Board member Jacqueline B. Giles on her recent election to the MAA Board of Governors. She was elected as a Governor at Large representing Minority Interests. As a member of these two Boards, Professor Giles will be able to facilitate communication and collaboration between these two organizations.

In its attempt to schedule speakers far in advance of meetings the Board continues to solicit suggestions for speakers from the membership. Proposed names should be sent to Nathaniel Dean who chairs the Program Committee.

LIFETIME ACHIEVEMENT AWARD

At the 2001 New Orleans meeting, NAM awarded a Lifetime Achievement Award to Eleanor Dawley Jones. President John W. Alexander made the presentation.

Dr. Jones earned her B.S. and M.S. at Howard University, and she was the tenth African American to earn her Ph.D. (1966 in Algebra from Syracuse University). She has served on the faculties of Hampton Institute and Norfolk State University, and she is a former Vice President of NAM.

photo by Jacqueline Giles



CORRECTION:

In the NAM Newsletter XXXI.4 we incorrectly stated the home institution of Dr. Alex Fluellen. He is a long time Professor of Mathematics, at Clark Atlanta University. He is not on the faculty of Texas Southern University. We apologize for the confusion.

CORRECTION:

In the NAM Newsletter XXXI.4 we inadvertently omitted Morgan State University's advertisement of a job opening for Chair of the Department of Mathematics. We apologize for the inconvenience.

AMUCHMA

For 24 issues, the African Mathematical Union's Commission on the History of Mathematics in Africa (AMUCHMA) has revealed new and interesting mathematical material to the world of history, archeology, and education. The reproduction and distribution of the first 24 issues of the AMUCHMA Newsletter counted with the generous support from the Research Department of the Swedish International Development Agency (SIDA-SAREC). The contract with SIDA-SAREC came to an end and there is a call for support financially AMUCHMA's activities and/or to suggest alternative sources of financing.

Thanks to Scott Williams, the English language edition of all issues of the AMUCHMA Newsletter is also accessible for free on the following website:
http://www.math.buffalo.edu/mad/AMU/amuchma_online.html

RENEW YOUR MEMBERSHIP

Is it time to renew your NAM membership? Our membership forms are located near the end of the Newsletter.

SUPPORT NAM'S ENDOWMENT CAMPAIGN

In order to become self-sufficient, NAM has an endowment program. Forms are located near the end of the Newsletter.

PRESIDENTIAL AWARD FOR EXCELLENCE

Dr. Abdulim A. Shabazz of Lincoln University received the 2000 Presidential Award for Excellence in Science, Mathematics, and Engineering Mentoring. The award, established by President William Clinton in 1996, is issued from the White House, and is accompanied by a grant of \$10,000 to aid in the recipient's mentoring activities.

Abdulim A. Shabazz was born Lonnie Cross in Bessemer, Alabama. He earned a B.S. in Math. and Chemistry from Lincoln University (PA) (1949), an M.S. in Mathematics at the Massachusetts Institute of Technology (1951), and a Ph.D. in Mathematics from Cornell University (1955). From 1952-53, Shabazz was an Assistant Mathematician with Cornell Aeronautical Laboratory (Buffalo). He was a Research Mathematician with the Metals Research Laboratory of the Electro Metallurgical Co. (Niagara Falls) in 1955. Dr. Shabazz was appointed as Assistant Professor of Mathematics by Tuskegee Institute in 1956. From 1957 to 1963, Dr. Abdulim A. Shabazz served as Chairman and Associate Professor of Mathematics at Atlanta University (now Clark Atlanta). He was appointed Director of Education for University of Islam #4 in Washington, DC in 1963, a position he served in until 1975. From 1975 until 1986, Dr Shabazz taught in Chicago, Detroit, and in Mecca, Saudi Arabia. In 1986, Shabazz returned to Clark Atlanta University where he served as Chair from 1990 to 1995. From 1998 until 2000 Dr. Shabazz was Chairman of the Mathematics Department at Lincoln University (PA).

When Shabazz began his graduate teaching career at Atlanta he found only two students pursuing a masters degree in mathematics. Within six years over 150 undergraduates majored in mathematics. Thirty of these went on to earn the Ph.D. from the Nation's leading universities. Since that time numerous others of his students have gone on to earn a Ph.D. in the Mathematical Sciences. Photo by Scott Williams.



NAM MATHFEST XI AT FAMU

From October 4,5,6, 2001, NAM's Eleventh Annual MathFest will be held at Florida A & M State University in Tallahassee Florida. This is a three-day weekend undergraduate mathematics research conference to enhance the development of American minority students. The program includes: presentations on current research by noted mathematicians; student presentations on undergraduate research; exposure to careers in mathematics; discussion of graduate school issues and direct contact with graduate school representatives.

MathFest can draw over 150 students from HBCU schools. Support is available for a limited number of students and the faculty that accompany them. For more information contact the National Office. Deadline for applications for support is May 1, 2001. We will announce the J. Ernest Wilkins Lecturer when it is established.

Below are four application forms: the Undergraduate Student Application Form, the Undergraduate Faculty Application Form, the Graduate Student Application Form, the Graduate Faculty Application Form.

MATHFEST XI UNDERGRADUATE STUDENT APPLICATION FORM

Check all where applicable

____ I am applying to attend Undergraduate MATHFest XI (UG MATHFest XI) sponsored by the National Association of Mathematicians, Inc. (NAM). I am also requesting financial support for lodging (double occupancy), and food.

A completed application should be returned by May 1, 2001 to be considered for financial support.

***** At Most Two Students Will Be Supported Per Institution *****

____ I understand that if I am selected to attend I must return an acceptance form by the due date, May 1, 2001 along with a \$25.00 **non-refundable registration fee** to reserve my position as an undergraduate student participant for **NAM's UG MATHFest XI**.

(Please print or type the following information)

Name (Mr. ___ Mrs. ___ Ms. ___)

Institution _____

Mailing Address _____

City _____ State _____ Zip Code _____

Telephone: Day (___) _____ Evening (___) _____

E-mail _____ FAX (___) _____

Social Security Number _____ (For Funding Records)

List College Mathematics Courses Completed :

List Mathematics Courses Currently Enrolled in :

CURRENT STATUS

Major(s) _____ Classification _____

(must be a junior or senior) Anticipated date of graduation _____

RESEARCH

Have you engaged in Mathematics Research recently? _____

If yes, where? ___ At home institution (Academic Year: _____); _____ in a summer program

(Year: ___) _____ Other

(Specify: _____)

Have you done a presentation or written a report of your research? _____

When? _____ Where _____

Would you consider giving a brief presentation on your research at Undergraduate MATHFest XI? _____ Yes _____ No

ACADEMIC RECORD

Is your GPA 3.00 or higher? Yes No List your GPA _____

ETHNICITY/RACE

Black/African-American Latino/Hispanic American
 American Indian/Native American Puerto Rican
 Alaskan Native Native U.S. Pacific Islander
 Caucasian Other (Specify) _____

PROSPECTIVE BENEFITS

Are you interested in pursuing graduate studies in Mathematics or a Mathematical Science?

Yes No. If yes, to pursue what degree(s): Master's Doctorate.

What is/are the primary benefit(s) that you hope to derive from attending Undergraduate MATHFest XI?

INTEREST IN ATTENDANCE WITHOUT FINANCIAL SUPPORT

Yes No I would be interested in attending without any financial support.

Please include with your complete application the following:

A recommendation from a faculty who has taught you a mathematics course at the collegiate level.

Mail applications to: Dr. Roselyn Williams; Dept. of Mathematics, Florida A and M Univ., Tallahassee, FL, 32307



MATHFEST XI GRADUATE STUDENT APPLICATION FORM

Check all where applicable:

_____ I am applying to attend Undergraduate MATHFest XI (UG MATHFest XI) sponsored by the National Association of Mathematicians, Inc. (NAM).

A completed application MUST be returned by May 1, 2001 to reserve my position as a graduate student participant for NAM's UG MATHFest XI.

_____ I understand that if I plan to attend I must return an acceptance form by the due date, May 1, 2001 along with a \$25.00 **non-refundable registration fee** to reserve my position as a graduate student participant for **NAM's UG MATHFest XI. This registration fee includes group meals and double occupancy lodging.**

******* You are requested to support your travel.*******

(Please print or type the following information)

Name (Mr. ___ Mrs. ___ Ms. ___)

Institution _____

Mailing Address _____

City _____ State _____ Zip Code _____

Telephone: Day (___) _____ Evening (___) _____

E-mail _____ FAX (___) _____

Social Security Number _____ (For Funding Records)

Current Status (Year in Graduate School) :

We wish for you to come prepared to participate on a graduate panel to share your experience in graduate school with undergraduates.

Mail applications to: Dr. Roselyn Williams; Dept. of Mathematics, Florida A and M Univ., Tallahassee, FL, 32307



MATHFEST XI UNDERGRADUATE FACULTY APPLICATION FORM

Check all where applicable:

_____ I am applying to attend Undergraduate MATHFest XI (UG MATHFest XI) sponsored by the National Association of Mathematicians, Inc. (NAM). I am also requesting financial support for lodging, and food. One faculty member will be provided support only if at least two students are accompanying them from their institution.

A completed application should be returned by May 1, 2001 to be considered for financial support. Registration includes Lodging (double occupancy), board and conference material.

_____ I understand that if I plan to attend I must return an acceptance form by the due date May 1, 2001 along with a \$25.00 **non-refundable registration fee** to reserve my position as an undergraduate faculty participant for **NAM's UG MATHFest XI.**

(Please print or type the following information)

Name (Dr. ___ Prof. ___ Mr. ___ Mrs. ___ Ms. ___)

Institution _____

Mailing Address _____

City _____ State _____ Zip Code _____

Telephone: Day (___) _____ Evening (___) _____

E-mail _____ FAX (___) _____

Social Security Number _____ (For Funding Records)

Will undergraduate students attend from your institution? If yes, please list names.

Please bring recruitment/department materials and be prepared to talk to students.

Mail applications to: Dr. Roselyn Williams; Dept. of Mathematics, Florida A and M Univ., Tallahassee, FL, 32307



MATHFEST XI GRADUATE FACULTY APPLICATION FORM

Check all where applicable:

_____ I am applying to attend Undergraduate MATHFest XI (UG MATHFest XI) sponsored by the National Association of Mathematicians, Inc. (NAM).

A completed application is being requested to be returned by May 1, 2001.

_____ I understand that I am to return my Registration Form by the due date, May 1, 2001, along with a \$100.00 **non-refundable registration fee** to reserve my position as a Graduate Faculty participant for **NAM's UG MATHFest XI**. This registration fee covers conference materials and group meals.

(Please print or type the following information)

Name (Dr. ___ Prof. ___ Mr. ___ Mrs. ___ Ms. ___)

Institution

Mailing Address _____

City _____ State _____ Zip Code _____

Telephone: Day (____) _____ Evening (____) _____

E-mail _____ FAX (____) _____

Social Security Number _____ (For Funding Records)

Will a minority graduate student(s) accompany you? If yes, please list name(s).

Please bring recruitment/departmental materials and be prepared to talk to students.

Mail applications to: Dr. Roselyn Williams; Dept. of Mathematics, Florida A and M Univ., Tallahassee, FL, 32307

ECSU - NAM 2001 SUMMER RESEARCH INSTITUTE IN COMPUTATIONAL SCIENCE-SCIENTIFIC VISUALIZATION MAY 14 - MAY 26, 2001

To Explore and Engage in Research Activities that are of interest to DoE/

To Enhance Increased Involvement and Productivity in future DoE Related Research

Sponsored by Elizabeth City State University (ECSU) and the National Association of Mathematicians, Inc. (NAM) with funding support from the Dept. of Energy (DoE).

PARTICIPATION LIMITED: 15 students, 10 faculty; application-selection - acceptance required.

Conference participation includes room and meals and a \$500 stipend for students.

(A maximum of \$250 is provided for travel to and from the Institute.)

A. Length of Time: Two (2) weeks

B. Institute Dates: May 14 - May 26, 2001

C. Generic Institute Structure: Tutorials -Lab Assignments-Presentations-Project Dev.

D. Participants: Fifteen (15) Student Mathematical Sciences Majors,
Ten (10) Mathematical Sciences Faculty Mentors - Team Leaders,
{25 Persons: Five (5) Research Teams; 3 students - 2 faculty, per team}

**For application/information, contact Johnny L. Houston at (252) 335-3361, Fax# (252) 335-3651
(email: jlhouston@mail.ecsu.edu)**

COTTRELL COLLEGE UNDERGRADUATE SCIENCE FACULTY AWARDS

Primary Sponsor: Research Corporation (AZ)

PURPOSE: Support of significant research which aids the development of undergraduate faculty and their students is the goal of the Cottrell College Science Program.

The awards are designed to provide summer support and currently average about \$31,000.

DEADLINE: May 15, 2001

SUMMARY: The principal investigator must have an appointment in a department of astronomy, chemistry or physics, which offers at least baccalaureate, but not doctoral degrees. Preference is given to tenured or tenure-track faculty.

The potential of a proposed research project to add to fundamental scientific knowledge is the prime criterion in its evaluation. Other factors are college research support, student participation, and the contribution the research will make to the college's science programs.

Cottrell College Science Awards, approved for one or two years, provide direct expenses necessary to the proposed research:

- * Equipment and supplies
- * Student summer stipends up to \$3,500 for 10 weeks
- * Faculty summer stipends up to \$7,500 for 8 weeks
- * Travel costs to use facilities not available on campus
- * Services or requirements essential to the research

Qualified applicants in the first three years of their first appointment should contact Research Corporation for an application. Prospective applicants beyond their third year of appointment should submit a three- to five-page preliminary proposal including:

- * Subject of research
- * Significance
- * Experimental protocol and feasibility
- * Brief biography of the applicant
- * Role and extent of student involvement
- * Itemized budget for two years
- * Budget rationale including current funding, institutional support and future funding
- * Summary of the impact of additional resources

To obtain more information on the Cottrell College Science Awards CONTACT:

Science Advancement Program; Research Corporation;
101 N. Wilmot Road, Suite 250; Tucson, AZ 85711

E-mail: awards@rescorp.org

Website: <http://www.rescorp.org>

PROJECT NEXT

Project NExT (New Experiences in Teaching) is a program for new or recent Ph.D.s in the mathematical sciences who are interested in improving the teaching and learning of undergraduate mathematics. It addresses the full range of faculty responsibilities in teaching, research, and service, and it provides professional support for new faculty as they undertake these activities. Each year, about sixty faculty members from colleges and universities throughout the country are selected to participate in a workshop preceding the MAA summer meeting, activities during MAA meetings, and an electronic discussion network. Faculty for whom the 2001-02 academic year will be the first or second year of full-time employment with significant teaching responsibilities at the college/university level are invited to apply to become Project NExT Fellows.

The first event for the 2001-02 Project NExT Fellows will be a Workshop, July 30 - August 1, 2001, just prior to the summer MAA meeting (the Mathfest) in Madison, Wisconsin (August 2-4, 2001). At this Workshop and at Project NExT sessions during the Mathfest, Fellows will explore and discuss issues that are of special relevance to beginning faculty, including:

1. Effective strategies for teaching calculus, pre-calculus, and differential equations;
2. Innovative approaches to liberal arts mathematics, statistics, and more advanced courses;
3. Involving undergraduates in mathematical research;
4. Alternative methods of assessing student learning;
5. Perspectives from pedagogical research;
6. Getting your research off to a good start and writing grant proposals;
7. Balancing teaching and research;
8. The Fellows will also have an opportunity to meet with Fellows who began the program in previous years.

Following the Workshop, Project NExT Fellows will attend the summer MAA Mathfest, August 2-4, 2001, participating in all the opportunities of that meeting, and choose among special short courses organized by Project NExT. During the following year, Project NExT Fellows will participate in:

*An electronic network that links Project NExT Fellows with one another and with distinguished teachers of mathematics;

*Special events at the Joint Mathematics Meetings in San Diego, CA, January 6-9, 2002;

*A one-day workshop in 2002 and the MAA Mathfest immediately afterwards (probably in Burlington, Vermont, July 31- August 3).

There is no fee for participation in Project NExT itself, and Fellows will be provided with room and board at the Project NExT Workshop in Madison. Fellows also do not have to pay for the special short courses at the summer Mathfest that are organized by Project NExT. Institutions employing the Project NExT Fellows are expected to provide all other expenses associated with the meetings, and the level of institutional support is a consideration in the application process.

Application forms are available at the Project NExT booth at the Joint Mathematics Meetings in New Orleans and can also be found on the Project NExT web page, which is <http://archives.math.utk.edu/projnxt/>

The application deadline is April 13, 2001. For more information, contact one of the following:

T. Christine Stevens, Director of Project NExT, Dept. of Mathematics and Mathematical Computer Science, Ritter Hall 104, Saint Louis University, 220 N. Grand Blvd., St. Louis, MO 63103 (Phone: 314-977-2436; email: stevensc@slu.edu)

Joseph Gallian, Co-director, Dept. of Mathematics and Statistics, University of Minnesota, Duluth, MN 55812 (Phone: 218-726-7576; email: jgallian@d.umn.edu)

Aparna Higgins, Co-Director, Dept. of Mathematics, University of Dayton, Dayton, OH 45469 (on sabbatical at USMA, West Point, NY 10996; Phone: 845-938-2719; email: higgins@saber.udayton.edu)

JOB OPENINGS

JOB OPENINGS WEB SITE

For several years, NAM has had a web site with job openings. This process is open to advertisers in the Newsletter. The advertisements appear there four to six weeks before you receive the Newsletter. Go to the editor's NAM web site within MAD: <http://www.math.buffalo.edu/mad/NAM/NAM-index.html>

Exception: Please note that from Jan 1 2001 to June 1 2001 there will be no new entries to this web site.

UNIVERSITY OF MICHIGAN LECTURER FOR MATHEMATICS

The Comprehensive Studies Program (CSP), a unit in the College of Literature, Science and the Arts at the University of Michigan, seeks a full-time Lecturer in Mathematics to be appointed in cooperation with the Department of Mathematics. The starting date of the appointment is September 1, 2001.

This is a three-year renewable appointment (non-tenure track) with an assignment to teach introductory college level mathematics through the standard calculus sequence. A Ph. D. in Mathematics is preferred, though a Master's degree in Mathematics, plus three years of relevant experience will be considered. Excellence in teaching is the primary criterion for appointment and for re-appointment. Experience working with special student populations, such as diverse ethnic or language groups, is highly desirable.

Please send curriculum vitae (or resume), at least three letters of reference, and a statement of teaching philosophy no later than **April 1, 2001 to: Director, Comprehensive Studies Program**, 1159 Angell Hall, Ann Arbor, MI 48109-1003. The University of Michigan is a Non-Discriminatory, Equal Opportunity Employer.

GETTYSBURG COLLEGE
One-Year Position in Mathematics

The Department of Mathematics at Gettysburg College invites applications for a one-year position at the Assistant Professor level beginning August 2001. Applicants must have a Ph.D. in mathematics or applied mathematics or expect to complete all requirements for the degree by September 2001. Excellence in teaching and a commitment to research are essential. Preference will be given to an individual who is willing to teach a broad range of undergraduate mathematics courses and who has the desire to involve undergraduate students in research.

Gettysburg College is a highly selective liberal arts college located within 90 minutes of the Baltimore/Washington area. Established in 1832, the College has a rich history and is situated on a 220-acre campus with an enrollment of 2,300 students. Gettysburg College is committed to creating a more diverse campus environment. As a part of that process, the College gives candidates from historically underrepresented groups strong consideration. Included in an attractive benefits package is a Partner Assistance Program.

Please send a letter of application explaining your interest in our department, a curriculum vitae, a brief description of your teaching methods and objectives, and a summary of your research goals to:

Mathematics Search Committee

Department of Mathematics

Gettysburg College

Gettysburg, PA 17325

Also arrange for the committee to receive three letters of recommendation addressing teaching effectiveness and research potential. If you applied for our tenure-track position beginning August 2001, then please send only an e-mail (bhelm@gettysburg.edu) or a letter indicating that you wish to be considered also for the one-year position, and do not resubmit your application materials. Completed applications received by March 19, 2001, will receive full consideration.

RENEW YOUR MEMBERSHIP

Is it time to renew your NAM membership? Our membership forms are located near the end of the Newsletter.

SUPPORT NAM'S ENDOWMENT CAMPAIGN

In order to become self-sufficient, NAM has an endowment program. Forms are located near the end of the Newsletter.



NAM'S ENDOWMENT CAMPAIGN "A CAMPAIGN FOR THE PERPETUITY OF NAM" PLEDGE – CONTRIBUTION FORM

The principal of the campaign is never to be spent; only the interest and dividends received from the investment of these funds may be spent. (All life memberships will go toward NAM's campaign).

To help with the success of this campaign, we are requesting all members and friends of NAM to contribute what you can and to assist NAM by helping NAM to locate other contributors.

Please pledge the amount that you desire to contribute and please honor all pledges (where feasible) by paying \$100.00 or more toward the pledge. Persons may pay for a Life Membership over a period of one year by making four payments of \$100.00 each.

Send to: Dr. Robert E. Bozeman, Secretary-Treasurer, NAM; Depart. of Mathematics; Morehouse College; Atlanta, GA 30314; (404) 215-2613 (office); rbozeman@morehouse.edu

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All contributions are tax deductible. (Please make checks payable to NAM's Endowment Campaign)

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PLEASE RETURN THIS COMPLETED FORM AND MEMBERSHIP DUES TO :

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THE HISTORY OF THE NATIONAL ASSOCIATION OF MATHEMATICIANS: THE FIRST THIRTY (30) YEARS: 1969 - 1999

Author: Johnny L. Houston,

Elizabeth City State University; USA,

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This two hundred forty two (242) pages volume is a comprehensive and complete volume of the activities of NAM from its inception in 1969 until 1999. The volume consists of five chapters; Chapter I: NAM Today, 1999; with a Historical Perspective; Chapter II: The Formative Years, 1969-1974; Chapter III: The Development of NAM as an International Organization of Quality: 1975 - 1989; Chapter IV: A Decade of Growth and Expansion, Building a Solid Foundation for the Future: 1990 - 1999; and Chapter V: NAM: Yesterday, Today and Tomorrow. Additionally, the volume contains 38 pages of photographs (most in color) of hundreds of individuals at various NAM activities. The Sub-Listings in the Table of Contents, the List of Photographs, and the eight pages of index make it easy to find any of the hundreds of activities and persons included in the volume. This historical volume has information and photographs that cannot be found in print in any other volume about NAM. It is a valuable volume for individuals, mathematics departments and libraries that know or wish to know about NAM. For a limited time, the volume may be obtained for the donations listed below.

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