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# Louisiana/Mississippi Section of the <br> Mathematical Association of America 

## NEWSLETTER—WINTER 2009

Volume 31. No. 2

## Message from the Section Chair <br> Greetings from Mississippi College!

As this year's chair of the Louisiana-Mississippi section, I am pleased to invite you to our annual meeting, March 5-7. This is shaping up to be one of our best meetings ever. For students, in addition to the integration bee, team competition and student papers, we will be having the national president of Pi Mu Epsilon, David Sutherland, as the speaker at the student luncheon and a showing of Flatland on Thursday night between rounds of the integration bee.

Our national speaker will be the new president of the MAA, David Bressoud. His topic will be how enrollment in calculus has changed over the years and how it affects all of us. It will be followed by a panel discussion including an AP calculus teacher, a community college calculus teacher and a university calculus teacher.

At the banquet on Friday night we will be honoring the life and legacy of R. D. Anderson. On Saturday morning we will be having an invited talk by our distinguished teaching award recipient from last year, George Cochran. On Friday afternoon and Saturday morning we will have parallel contributed talk sessions. I hope you can see that there are many opportunities for you to talk to your colleagues, learn something new and renew your enthusiasm for mathematics at the undergraduate level.

We look forward to seeing you in March.

Tommy Leavelle

## Section Officers

Chair: | Tommy Leavelle |
| :--- |
| Mississippi College |
|  |
| leavelle@mc.edu |

MS Vice-Chair: Melinda Gann
Mississippi College
gann@mc.edu

LA Vice-Chair: Randy Wills Southeastern Louisiana University rwills@selu.edu

Secretary/Treasurer: Judith Covington LSU-Shreveport
Judith.covington@1sus.edu

Newsletter Editor: Clifton Wingard
Delta State University
cwingard@deltastate.edu

Immediate Past Chair: Lenny Ornas McNeese State University gornas@mcneese.edu

Internet Coordinator: John Travis Mississippi College travis@mc.edu

Section Governor: John Travis
Mississippi College
travis@mc.edu

## 2008 DISTINGUISHED TEACHING AWARD



At the annual section meeting last year, Dr. George Cochran, Associate Professor of Mathematics at Louisiana State University, was selected as the recipient of the Louisiana/Mississippi Section Distinguished Teaching Award for 2008. The paragraphs which follow provide a short biographical look at George in his own words.

I grew up in northeastern Oklahoma in a little town called Wagoner, which had two elementary schools, one junior high, and one high school. After graduating in 1977, I went the University of Oklahoma in Norman where I became a math major in my junior year and decided to go to graduate school in math during my senior year. I received a bachelor's degree in math from the Univ. of Oklahoma in 1981, a master's degree in math from the Univ. of California - Berkeley in 1983, and a Ph.D. in math from the Univ. of Michigan Ann Arbor in 1989. I wrote my dissertation on random Blaschke products under the direction of Allen Shields, who died of cancer two months after I defended the thesis.

During this time I also got married and had a baby, and I played too much bridge.

LSU-Baton Rouge hired me as an assistant professor of mathematics immediately upon my graduation with a Ph.D. in 1989, and I've been here ever since. I shifted my research focus from spaces of analytic functions to white noise analysis and worked with the probability group here. I also became involved in consulting projects for the gambling industry in which I calculate optimal playing strategies for new games. The mathematics required in this varies with the game, but typically uses discrete-time stochastic control theory, fractional dynamic programming and occasionally some aspects of game theory. I find this fascinating and a lot of fun, and I still spend a fair amount of time in it.

I have taught a huge variety of courses during the 28 years that I've been in charge of a classroom, ranging from small graduate seminar courses and the standard graduate courses in measure theory and probability, through upper-division courses in real and complex analysis, linear algebra and stochastic processes, through sophomore "bridge" courses, through too many calculi, to courses in college algebra and ones titled "The Nature of Mathematics." I've lectured in trigonometry to classes with 700 students sitting in an auditorium with 1000 seats. All of these experiences have been wonderful, and I treasure my memories from each of them.

In my second year at LSU, on my own initiative, I revived a long-moribund undergraduate math club to try to establish more of a community among our undergraduate majors. I served as faculty sponsor of the club for the next decade. I became the department's undergraduate adviser just after being tenured, which later expanded to being the chair of a committee of advisers. For the past four years I have been the department's Associate Chair for instruction, with responsibility for the undergraduate program, scheduling and
teaching assignments, complaints and grade appeals, cheating cases, and a whole host of other mostly bureaucratic exercises in frustration. I have found that this job has interesting problems, people-problems, which enliven my day. One of these, the problem of assessing the quality of instruction, is something I plan to discuss in my lecture at our sectional meeting.

A long time ago I was browsing a newsletter on the MAA section's website and noticed that Steve Ligh at Southeastern had organized a regional "Student Team Competition." I thought this would be a great way to get some LSU math majors together and have a common experience outside of the classroom. When I let Steve know of my plans to bring some students to the competition in its second year, he called me and asked if I could submit a couple of problems. Thus I got put on the MAA Student Team Competition committee, where I've been ever since. I chaired the committee for a while. My opinion is that the undergraduate activities at the sectional meeting - the competition, the Integration Bee and the student paper session - are among the most important and valuable activities that the section does, and I hope that they continue to thrive.

I have two hobbies: croquet and backgammon. I am currently the national champion for 9 -wicket croquet in the U.S. Croquet Association and I have a -1.5 handicap in the 6 -wicket version of U.S. croquet.


George coordinated the team competitions for a number of years. These photos are from 2005 and 2006.

# Call for Nominations for the LA/MS MAA Section Distinguished Teaching Award 

The Outstanding Teacher Award Committee seeks nominations for 2008. We need you to nominate your deserving colleagues for the Section Distinguished Teaching Award!! Recipients of this award also serve as the section's official nominee for the MAA's Haimo Award. The amount of work required to nominate someone is pretty minimal so please consider following through on this today. The typical nomination packet includes the nomination form (available from the link below), a narrative describing the nominee's teaching success, some evidence of the nominee's teaching success, and up to five onepage letters of recommendation, at least two of whom should come from the nominee's students or former students. The deadline for submissions is February 10, 2009.

Nominations may be sent to George Cochran at:

Dr. George Cochran
Dept. of Mathematics
LSU
Baton Rouge, LA 70803-4918
cochran@math.lsu.edu, (225) 578-1619
More information, including the nomination form, can be found on the LA/MS MAA Section website at:
http://www.mc.edu/campus/users/travis/maa/dist inguished/index.php

Eligibility:
In order to be considered eligible for this award, a nominee must satisfy each of the following criteria:

1. Any nominee must be a college or university teacher assigned at least halftime during the academic year to teaching a mathematical science in a public or private college or university (from twoyear college teaching through teaching at the Ph.D. level) in the United States or Canada. Those on approved leave
(sabbatical or other) during the academic year in which they are nominated qualify if they fulfilled the requirements in the previous year.
2. Any nominee must have at least 5 years of teaching experience in a mathematical science.
3. Any nominee must be a member of the Mathematical Association of America.

## Nominees will be judged on the following

 criteria:1. Is the nominee widely recognized as extraordinarily successful in teaching? Teaching can be interpreted to be more than classroom teaching. It could also include activities such as preparing students for competitions, attracting students to become majors in a mathematical science or to become Ph.D. candidates, etc.
2. Has the nominee's teaching effectiveness been well documented?
3. Has the nominee had an influence in teaching beyond his/her own institution(s)? This can take on many forms such as making a lasting impact on alumni, providing influence on the profession through curricular revisions in college mathematics teaching, making contributions to influential innovative books on the teaching of college mathematics, etc.
4. Has the nominee fostered curiosity and generated excitement about mathematics in his/her students?

## To submit a name to the committee:

In order to be considered, nominations must be submitted on the Nomination Form. If you need a copy of the Nomination Form, you may get a copy of it from our section's webpage. Completed nomination packets should be sent to the Committee Chair. For consideration, a complete nomination packet must be received by the deadline.

## Section NExT

We are delighted to announce our 7 new Section NExT Fellows this year: Christina EubanksTurner and Jimmy Kimbell from University of Louisiana Lafayette; Dohyoung Ryang, Chenhua Zhang, and Jeremy Lyle from the University of Southern Mississippi; Linhong Wang from Southeastern Louisiana University; Yan Wang from Millsaps College; and Curtis Wesley from Louisiana State University Shreveport. They join six Fellows from last year: Christine Gorton, Tiffany Andrus and Michael Muffuletto from McNeese State University; Mark Thompson from Northwestern State University; Leslie Horton from Delta State University and Dhruba Adhikari from Mississippi University for Women.

We have a full Section NExT program planned for the conference, including a dinner for our Section NExT Fellows and their Mentors on Thursday evening and three excellent sessions on Friday morning: "How to Get Involved in the MAA?" by Section Governor John Travis (Mississippi College) and MAA Associate Executive Director Michael Pearson; a talk on "How to Survive and Thrive in Academia" by our featured speaker Connie Campbell (Millsaps College); and an Idea Fair. In addition, the Section NExT Program will attend the Distinguished Teaching Address on Saturday morning by George Cochran (LSU). All National NExT Fellows are welcome to join us.

Section NExT (New Experiences in Teaching) is a two year professional development program designed for new college and university faculty holding a masters or doctorate in the mathematical sciences. It addresses the full range of faculty responsibilities including teaching, scholarly activities, and service.

Jenna Carpenter, Clifton Wingard, John Osoinach
LA/MS MAA Section NExT Committee

## Locations and Nominations Committee Seeks Nominations

The Section Locations and Nominations Committee will be putting together a slate of nominees to present at the annual Section business meeting. The specific offices for which nominees will be presented are listed below. All persons nominated must be members of the MAA (dues paid in full), and they will all be agreeing to serve on the Executive Committee.

If you would like to be considered for one of these offices or if you would like to suggest the name of someone to be considered, the Locations and Nominations Committee would very much appreciate your input.

Thanks so much,
Connie Campbell, Chair
2009 LA/MS MAA Section Locations and Nominations Committee
email: campbcm@millsaps.edu
phone: 601.974.1371

This slate will include nominees for the offices of:

1) Section Chair: This person will serve as the program chair and coordinator for the Spring 2010 meeting of the Section, and chair the Executive Committee of the Section. The Loc. and Nom. Committee will be nominating Randy Wills who has served as LA Vice-Chair over the past year and who has graciously agreed to host the 2010 Section meeting.
2) Vice-Chair for Mississippi: This person is agreeing to serve for 1 year to help the Section Chair and to serve on the Executive Committee, but they would also be agreeing for next year's Locations and Nominations Committee to nominate them for Section Chair. That is, this year's MS Vice-Chair nominee is also consenting to host the 2011 Section meeting in Mississippi.
3) Vice-Chair for Louisiana: This person is agreeing to serve a 1 year term in which they will serve on the Executive Committee and be a key leader in helping the Section Chair organize the Spring 2010 meeting.
4) Secretary-Treasurer: This person is agreeing to serve a 3 -year term as Secretary-Treasurer of the Section. They will keep minutes of official meetings of the Section and meetings of the Executive Committee, be responsible for the safekeeping of all monies paid into the Section for any purpose, be responsible for the payment of bills of the Section, maintain proper and accurate books, accounts, and records of the Section, and complete reports and forms required annually by the MAA Office (on finances and activities of the Section).

## Call for Papers

Several contributed paper sessions will be held in conjunction with the Spring section meeting. For any faculty or doctoral student interested in presenting a talk, send your name, school, title of talk and a short abstract ( 50 words or less) to the Section Vice-Chair, Dr. Melinda Gann (gann@mc.edu). Abstracts may be submitted electronically as an email attachment in WordPerfect, Microsoft Word, or PDF format. The deadline for submission of abstracts is February 15, 2009.

## Integration Bee

The annual integration bee will be held on February 28 from 6:30 - 9:00 p.m. Each institution may register up to 4 undergraduate students, and registration will be limited to 50 . The deadline for registering is March 2. For more information, see the section website (http://maa.mc.edu/meeting/IntegrationBee/integ ration_online.html), or contact Dr. Randy Wills (rwills@selu.edu).

## Call for Student Papers

The LA-MS Section of the MAA will hold its annual Student Paper Competition at the Spring section meeting. Papers are solicited in two categories: graduate and undergraduate. The graduate category is limited to master's students. Ph.D. students are encouraged to submit for the contributed paper sessions listed above. Presentations at the meeting will be limited to 12 minutes.

Send your name, school, and a short abstract (50 words or less) to Dr. Melinda Gann. Abstracts and papers should be submitted electronically to Dr. Gann (gann@mc.edu) as an email attachment in WordPerfect, Microsoft Word, or PDF format. The deadline for submission of abstracts is February 15, 2009.

A written paper of 6 pages or less must be received and include the author's name, institutional affiliation, faculty advisor and an email address. Late entries will not be considered. Contact the Student Papers Committee Chair or the Rules for Student Papers for more details.

Prizes will be awarded in each category separately, with no more than 3 prizes in each. The number of prizes awarded shall be at the discretion of the judges, and shall be determined depending on the number and quality of the entries in each category. The amount of the prizes shall be as follows: first prize, $\$ 100.00$, second, $\$ 75.00$, and third, $\$ 50.00$.

Each entry will be judged on the basis of both the written and oral presentation, with equal consideration given to both.

## Student Paper Competition

The LA-MS Section of the MAA will hold it annual student Paper Competition at the Spring Section meeting. Send an electronic abstract and an electronic copy as an email attachment in WordPerfect, Microsoft Word, or PDF format to Dr. Melinda Gann (gann@mc.edu) by February 15, 2009.

- There are two categories of papers: graduate and undergraduate. The graduate category is limited to master's students. Ph.D. students are encouraged to submit for the contributed paper sessions.
- Presentations at the meeting will be limited to 12 minutes.
- A written paper of 6 pages or less must be received and include:
- author's name
- institutional affiliation
- faculty advisor
- email address
- Prizes will be awarded in each category separately, with no more than 3 prizes in each.
- The number of prizes awarded shall be at the discretion of the judges, and shall be determined depending on the number and quality of the entries in each category.
- The amount of the prizes shall be:
- For undergraduate papers:
- first prize, $\$ 100.00$
- second, $\$ 75.00$
- third, \$50.00.
- For graduate papers:
- first prize, $\$ 100.00$
- second, $\$ 75.00$
- third, \$50.00.
- Each entry will be judged on the basis of both the written and oral presentation, with equal consideration given to both.
- All graduate papers are eligible for the graduate prizes.



## Student Competition

The student team competition will be held at the Spring Section Meeting on Friday, from 8:30 11:00 a.m. Sponsors, be sure to have your teams ready to check in on time on Friday morning.

## CONTEST RULES

1. Each institution may send at most two teams, each team consisting of at most four students. The four students within one team may work together on problems. Students may not get help from people on other teams, even if from the same school.
2. Participants must be undergraduate students and currently enrolled at the institution they represent. This means that the student has not yet earned a bachelor's degree-exceptions for students who are returning back to school to pursue a second bachelor's degree when the first degree was not in a mathematical area may be considered. A student from abroad who has completed training equivalent to an American bachelor's degree and who is taking solely graduate-level courses in a graduate program will be ineligible.
3. Each team must have a faculty sponsor.
4. Calculators comparable to the TI-85 without a symbolic manipulator will be allowed. Calculators with a symbolic manipulation capability, such as the TI-92 or TI-89+, are not allowed.
5. The contest will last 2 hours.
6. The Competition Committee is solely responsible for interpreting the rules and for ruling on any unforeseen situation.
7. Cash prizes will be awarded for $1^{\text {st }}$ place $(\$ 100), 2^{\text {nd }}$ place (\$75), and $3^{\text {rd }}$ place $(\$ 50)$ teams.

## CONTEST PROBLEMS

The contest will consist of 2 groups of problems. Each team may choose any 5 problems from Group II.

Each problem will be worth 10 points. The problems are from the following areas:

## Group I

## Ten mandatory problems

Calculus (5 problems)
Abstract Algebra (1 problem)
Advanced Calculus (1 problem)
Differential Equations (1 problem)
Discrete Mathematics (1 problem)
Linear Algebra (1 problem)

## Group II

## Choose any 5 problems

Abstract and Linear Algebra (2 problems)
Advanced Calculus (2 problems)
Differential Equations (1 problem)
Multivariable Calculus (1 problem)
Geometry (1 problem)
Point-Set Topology ( 1 problem)
Probability/Statistics (1 problem)
Set Theory/Logic (1 problem)

To register a team (or teams), please fill out the application and return by February $15 \mathbf{2 0 0 9}$, if possible (late registrations are accepted). Or, use the online application form located at http://sandbox.mc.edu/~travis/maa/compform_o nline.html

## Consider a Contribution in Support of LA/MS Student Activities.

The student activities include

- Integration Bee
- Student Team Competition
- Student Luncheon
- Student Paper Sessions


## HOTEL INFORMATION

A conference room rate has been arranged through the Hampton Inn in Clinton. Additional rooms are available at the same rate at the Comfort Inn, but the Hampton Inn will be handling all conference rate reservations. Please call directly to the number listed below and be sure to mention "LA/MS Section of the MAA" when making your reservation. You must make your reservation by February 5, 2009, in order to get the conference rate.

Hampton Inn
493 Springridge Road
Clinton, MS 39056
(601) 925-9393

Conference Rates
Doubles: $\quad \$ 89$ per night plus taxes (currently 9\%)
King Studies: $\$ 94$ per night plus taxes (currently 9\%)
King Suites: $\$ 94$ per night plus taxes (currently 9\%)

The Hampton Inn is at Exit 36 on Interstate 20 and is less than 1 mile from campus.

For more information or if you have questions, contact the section chair, Tommy Leavelle. Please be sure to abide by the reservation deadline in order to receive the conference rate.

Be sure to make your reservation for the Banquet on Friday evening

The Life and Legacy of R. D. Anderson

## A Note about Our Main Speaker

Dr. David Bressoud is the main speaker for our meeting this year. He is President of the Mathematical Association of America and DeWitt Professor of Mathematics at Macalester College in St. Paul, Minnesota. Dr. Bressoud grew up in Bethlehem, Pennsylvania, and graduated with a bachelor's degree from Swarthmore College in Swarthmore, Pennsylvania. Following his graduation, he went to Antigua in the West Indies with the Peace Corps and taught mathematics and science at Clare Hall School. He entered graduate school at Temple University in Philadelphia and earned a PhD degree. He taught at Pennsylvania State University from 1977 - 1994 and at Macalester College from 1994 to the present time. He has written an impressive number of research articles in number theory and combinatorics, and he has authored a number of books on topics which include real analysis, calculus, and number theory. In addition to his research, Dr. Bressoud has a passion for teaching. He has a concern for undergraduate education and the effective dissemination of mathematical knowledge. For a more intimate glimpse, see the interview with David Bressoud by Ivars Peterson at http://www.maa.org/news/010209bressoud.html (Information obtained from maa.org)

## A Note about the Student Luncheon Speaker

David C. Sutherland is Associate Provost and Professor of Mathematics at Hendrix College in Arkansas. He is currently serving a three-year term as President of Pi Mu Epsilon, the national honorary mathematics society for undergraduates that has 335 chapters at colleges and universities around the country. He received a B.A. degree from Hendrix College and an M.A. and Ph.D. from North Texas State University where his area of specialty was combinatorics. He has been the faculty advisor for seven student publications in the Pi Mu Epsilon Journal; four of those papers received Andree Awards.

## Distinguished Teaching Address

George Cochran is the 2008 recipient of the section's distinguished teaching award. He is an associate professor and Associate Chair for Instruction at Louisiana State University.

## Program Highlights

## Thursday evening:

Section NExT dinner
Integration bee
Showing of Flatland

## Friday morning:

Section NExT workshops
Student team competition
Student luncheon with invited address by David Sutherland
Department chairs luncheon

## Friday Afternoon:

Invited address by David Bressoud
Panel discussion on calculus at a variety of institutions
Student paper session
Contributed paper sessions

## Friday evening:

Banquet honoring the life and legacy of R. D. Anderson

## Saturday morning:

Liaisons breakfast
Contributed paper sessions
Invited address by George Cochran
Business meeting and awards presentation
Executive committee luncheon
Please see the online meeting information at http://maa.mc.edu/meeting for more details.

## STUDENT COMPETITION REGISTRATION FORM

Name of Institution: $\qquad$
Name(s) of Faculty Sponsor: $\qquad$
Faculty Sponsor E-mail: $\qquad$

Names and Classifications of Team Members

## TEAM I

|  | NAME | CLASSIFICATION |
| :--- | :--- | :--- |
| 1 |  |  |
| 2 |  |  |
| 3 |  |  |
| 4 |  |  |

TEAM II

|  | NAME | CLASSIFICATION |
| :--- | :--- | :--- |
| 1 |  |  |
| 2 |  |  |
| 3 |  |  |
| 4 |  |  |

*** You may also register by sending the above information by fax or e-mail to Vic Schneider
Email: vps3252@louisiana.edu
Mathematics Department
University of Louisiana at Lafayette
P. O. Box 41010

Lafayette, LA 70504-1010
Phone \#: (337) 482-5295
Fax \#: (337) 482-5346

## Louisiana/Mississippi Section of the Mathematical Association of America



## 2009 Annual Meeting

March 5-7, 2009
Mississippi College
Registration Form
Name:
(as it should appear on your name tag)
Affiliation: $\qquad$
(as it should appear on your name tag)
Email: $\qquad$
$\qquad$ Registration fee: Regular Advance: \$30
Late Registration: \$40 (after February 20, 2009)
Student: \$10
Free Student (Student registration is free for students from departments which are Institutional Partners of the Section)
$\qquad$ Institutional Partnership $=\$ 75$
$\qquad$ Department Chairs Luncheon: $\$ 12$ per plate
$\qquad$ Banquet "The Life and Legacy of R. D. Anderson": $\$ 25$ per plate
$\qquad$ Liaison's Breakfast (Please check if you are a liaison and will be attending the breakfast - March 7, 7:30 am)
$\qquad$ Contribution to support student activities
$\qquad$ Total
Please make check or money order payable to LA/MS Section of MAA
Mail to: Tommy Leavelle
Mississippi College
Box 4025
Clinton, MS 39058

The Committee on Sections is requesting that section secretaries answer specific questions in the annual section report. To assist our secretary in collecting this data, please make the appropriate selections regarding membership in the national MAA organization and regarding your current institutional affiliation. (Check all that apply.)
$\qquad$ MAA member $\qquad$ Non-MAA member
$\qquad$ College/University Faculty (Please select the highest mathematics degree offered at the institution where you currently teach)
$\qquad$ Bachelors $\qquad$ Masters $\qquad$ Doctorate
$\qquad$ High School Teacher $\qquad$ Business/industry/government employee $\qquad$ Retired/Emeriti
$\qquad$ Undergraduate student $\qquad$ Graduate student


## INSTITUTIONAL PARTNERSHIP APPLICATION FOR THE <br> LOUISIANA-MISSISSIPPI SECTION OF THE MAA

Cost per academic year: $\$ 75$
NAME OF INSTITUTION: $\qquad$

CONTACT PERSON: $\qquad$

CONTACT PERSON ADDRESS:
$\qquad$
$\qquad$
$\qquad$

CONTACT PERSON E-MAIL: $\qquad$

CONTACT PERSON FAX: $\qquad$

Benefits of Institutional Partnership:

- Registration for their students at no additional cost for the annual section meeting
- Display space to promote the institution's graduate program at the section meeting

Make checks payable to: LA/MS SECTION OF THE MAA
Send completed form and check to the current section Chair:
Tommy Leavelle
Mississippi College
Box 4025
Clinton, MS 39058

