

# Louisiana/Mississippi Section of the Mathematical Association of America

## NEWSLETTER—WINTER 2012 Volume 34 No. 2

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# LETTER FROM FRANK SERIO – LA/MS SECTION CHAIR

Dear Section Members,

I hope you had an enjoyable holiday season, and that this message finds you settled into a pleasant, productive spring semester. I also hope your plans for the spring include attending the section meeting held March 1-3 at Northwestern State in Natchitoches, Louisiana. Our program includes student activities, contributed talks, a workshop on online resources, and dinner in historic downtown Natchitoches. The keynote address will be given by Doug Ensley, MAA Vice-President. The third annual R. D. Anderson Lecture will be given by Erik Demaine who is currently serving as an MAA Polya Lecturer.

Student activities begin with the Integration Bee on Thursday night. The Student Team Competition kicks off first thing Friday morning followed by a luncheon for all students attending the meeting. Friday afternoon, students will present their work as part of the Student Paper Competition which has both an undergraduate and graduate track.

Section NExT activities will take place on Friday morning culminating in a panel discussion on innovative strategies in the classroom that should be of interest to all faculty. Friday afternoon, John Travis will be demonstrating Web Work, an online homework system, and Jenna Carpenter will be discussing the proposed changes to the By-Laws which will are up for a vote on Saturday. Contributed paper session will held on Friday and Saturday. Please consider presenting a paper and submitting it for publication in the peer-reviewed conference proceedings.

The banquet will be held Friday night at The Landing overlooking beautiful Cane River in our historic downtown.

#### **Section Officers**

Chair:

Frank Serio Northwestern State University serio@nsula.edu

LA Vice-Chair:

Mary Reeves Northwestern State University reevesm@nsula.edu

MS Vice-Chair:

John Perry University of Southern Mississippi John.Perry@usm.edu

Secretary/Treasurer:

Leslie Horton William Carey University lhorton@wmcarey.edu

Newsletter Editor:

Christine Gorton McNeese State University cgorton@mcneese.edu

Immediate Past Chair:

Laura Sheppardson University of Mississippi sheppard@olemiss.edu

**Internet Coordinator:** 

John Travis Mississippi College travis@mc.edu

Section Governor:

Jenna Carpenter Louisiana Tech jenna@coes.latech.edu Remember a portion of every faculty ticket to this event goes towards endowing the R. D. Anderson lecture series. Join us for a social hour before the meal and take in the sites of our lovely little town. If you are interested in seeing more of Natchitoches and the surrounding area, please visit

http://www.natchitoches.net/ or http://www.cr.nps.gov/nr/travel/caneriver/index.htm

A tentative list of activities is already posted on the section website. Please check there for more details as they are finalized. If you have any questions, please feel free to contact me at <a href="mailto:serio@nsula.edu">serio@nsula.edu</a>. I hope to see you all soon.

Frank Serio LA/MS Section Chair

# Governor's Report

I hope that you are making plans to attend a great Section Meeting in Natchitoches on March 1 – 3, 2011. MAA 2<sup>nd</sup> Vice President Doug Ensley will give the Invited Address on Friday afternoon. We have MAA Polya Lecturer Eric Demaine from MIT as our Anderson Distinguished Lecturer on Friday evening. The fund, named in honor of LA MS MAA Section member and former MAA President R.D. Anderson, supports a distinguished lecturer at our annual section meeting each year. We have raised approximately \$15,000 (out of our goal of \$25,000) from many generous Section and national MAA members. At the Joint Math Meetings in Boston in January, I was invited to talk about the Anderson Lecture Series at the MAA Section Officers Meeting and received lots of positive feedback. I also heard people talking about it at other venues at JMM!

One item at the Section Meeting that you may be interested in is the Friday session on our proposed new LA MS MAA Section Bylaws. We are required to update our bylaws periodically by the MAA. We took advantage of the opportunity to make some changes, most of them small. One bigger change we are proposing is to split the current Section Chair position into two positions – Chair and Program Chair. Not only does this bring us in line with most of the other MAA Sections (and the recommendation from the national MAA), but it helps separate those two really different functions and provides us with more continuity and institutional memory. We will vote on the new bylaws at the Business Meeting on Saturday morning. If you

would like to take a look at the proposed new bylaws (as well as our current bylaws), you can find a link on the top left of the bylaws page of the Section website at:

#### http://sections.maa.org/lams/bylaws.php

To entice you to scan the proposed new bylaws, I will have a small prize for the first twenty people I see at the Section Meeting who can tell me what the proposed new quorum is for a Section business meeting!

Encourage your students to sign up for the Integration Bee and Student Team Competition, as well as present a Student Paper. Encourage your new faculty to sign up for the Section NExT Program. Bring some faculty from your institution with you to the meeting. Volunteer for a Committee. Give a talk yourself! Buy a ticket to the Anderson Lecture (and maybe designate something extra as a donation for the Anderson Fund!?!). Nominate a colleague for the Outstanding Teaching Award. Our Section (one of the most active in the MAA!) is only as good as its members. Take advantage of this great resource by participating and giving back.

As always, I would welcome any comments or suggestions that you might have for new initiatives or ways that the Section and national organization can serve you better. Feel free to email me at <a href="mailto:jenna@latech.edu">jenna@latech.edu</a> or call me at 318-257-2101.

Jenna Carpenter LA/MS Section Governor

> Be sure to make your reservation for the banquet on Friday evening

R. D. Anderson Lecture given by Dr. Erik Demaine

# 2011 Distinguished Teaching Award



At the annual section meeting last year, Dr. Connie Campbell, Professor of Mathematics at Millsaps College, was selected as the recipient of the Louisiana/Mississippi Section Distinguished Teaching Award for 2011.

Connie M. Campbell is a professor of Mathematics at Millsaps College in Jackson, MS. She received her B.A. from Huntingdon College and her M.S and Ph.D. from the University of Mississippi. Connie completed her dissertation under the supervision of Dr. Bill Staton in the area of extremal graph theory and joined the mathematics faculty at Millsaps College in 1992.

Early in her career at Millsaps she began teaching the transition to proof course and this proved (pun intended) to be a pivotal experience. Connie quickly became fascinated with trying to determine what goes on in the mind of students as they are first learning to write proofs. Over time she began to videotape some of her students in small groups as they worked on constructing proofs. Some of the insights she gained from these experiences led to a number of articles, presentations, and collaborations all focused on helping students better develop their proof writing skills. After being encouraged by students and colleagues, Connie wrote Introduction to Advanced Mathematics: A Guide to Understanding Proofs which was published in 2011 by Cengage Learning.

Connie is currently working on a Phase 2 National Science Foundation grant designed to create a series of videos and ancillary materials which can be used to enhance student learning in a first proofs course. These videos are designed to be independent of the course text and to create teaching moments, offering professors an opportunity and environment to discuss common pitfalls students experience when trying to construct a proof, as well as effective strategies students can use to overcome these problems.

Connie's passion is teaching mathematics, but she also enjoys agility training with her dog Lucky, reading theology, kayaking, and traveling.

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

The Outstanding Teacher Award Committee seeks nominations for 2012. We need you to nominate your deserving colleagues for the Section Distinguished Teaching Award!! completed application must accompany each nomination. A complete application consists of a nomination form, a narrative describing the nominee's extraordinary teaching success (limit pages). evidence of the nominee's extraordinary teaching success (limit 3 pages), and up to five one page letters of recommendation two of which must come from the nominee's present or former students. For more details see:

http://sections.maa.org/lams/distinguished/index .php

Completed applications must be received no later than February 20, 2012. Please send applications to:

Connie Campbell Dept. of Mathematics Millsaps College Box 150086 Jackson, MS 39210

#### Section NExT

Are you a new faculty member within the first three years of beginning full-time employment with teaching responsibilities at the college or university level? Do you have any new faculty members in your department? New faculty need to be Louisiana-Mississippi MAA Section Next Fellows! Designed for new college and university faculty holding a masters or doctorate in the mathematical sciences, Section NExT (New Experiences in Teaching) is a two year professional development program addresses the full range of faculty responsibilities including teaching, scholarly activities, and service.

Each year at our Spring Section Meeting, Section NExT sponsors a program for fellows in which the needs and concerns of new faculty can be openly discussed with a regional network of mathematicians.

Among the topics featured in the program are:

- information on current trends and innovations in undergraduate education.
- how to establish collaboration and interaction between people from the many different kinds of institutions in our section, including private colleges, state universities, liberal arts colleges and community colleges.
- activities to encourage the participation of new faculty and their students in the programs of the LA/MS Section of the MAA.

In addition, the Section NExT Program matches participants with mentors from similar institutions.

The online application (see <a href="http://sections.maa.org/lams/next/application.ht">http://sections.maa.org/lams/next/application.ht</a> ml) consists of a short personal statement and a letter of support from the department chair. Section NExT fellows will be required to attend the spring section meeting for each of the next two years. National NExT fellows are

encouraged to participate in the Section NExT activities, as well!

Questions? Contact Leigh Ann Myers (myers@nsula.edu), Coordinator of the Section NExT Committee, or check out the Section website at:

http://sections.maa.org/lams/next/.

Deadline for receipt of applications for the 2012-2013 Section NExT Fellow selection is February 20, 2012

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## 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, Dr. Frank Serio, serio@nsula.edu. Abstracts should be submitted electronically as an email attachment in Microsoft Word or PDF format. The deadline for submission of abstracts is **February 20, 2012**.

#### **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. Lisa Galminas, galminas@nsula.edu. Abstracts and papers should be submitted electronically to Dr. Galminas as an email attachment in Microsoft Word, WordPerfect, or PDF format. The deadline for submission of abstracts is February 21, 2012.

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

# **Student Competition**

The student team competition will be held at the Spring Section Meeting on **Friday, from 8:00** – **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.
- 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<sup>st</sup> place, 2<sup>nd</sup> place, and 3<sup>rd</sup> place 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 online application form located at

http://sections.maa.org/lams/meeting/StudentCompetitions/compform\_online.html

by **February 27, 2012**, if possible (late registrations are accepted).

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# **Integration Bee**

The annual integration bee will be held on March 1 from 6:30 - 9:00 p.m. Each institution may register up to 6 undergraduate students, and registration will be limited to 50. The deadline for registering is February 27, 2012. For more information, see the section website

http://sections.maa.org/lams/meeting/IntegrationBee/IntegrationBee.html

or contact Dr. Randy Wills (rwills@selu.edu).

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# A Note about the Committee on the Status of the Profession

The Committee on the Status of the Profession is in the process of reviewing and updating the document *Guidelines for Programs and Departments in Undergraduate Mathematical Sciences*, which can be found at <a href="http://www.maa.org/guidelines/guidelines.html">http://www.maa.org/guidelines/guidelines.html</a>

As always, the MAA values your input! If you think that something should be added to, deleted from, or expanded in this document, please share those thoughts and ideas with Connie Campbell (<a href="mailto:campbcm@millsaps.edu">campbcm@millsaps.edu</a>).

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

The student activities include

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

# Louisiana/Mississippi Section of the Mathematical Association of America 89th Annual Meeting

#### Tentative Schedule of Events

#### Thursday, March 1

- Registration: 6:00 8:00
- Student Integration Bee: 6:30 9:00
- Section NExT Reception and Dinner: 7:00 9:00

#### Friday, March 2

- Registration: 8:00 4:00
- Student Team Competition: 8:30 11:00
- Section NExT: 8:30 9:45; Dr. Leigh Ann Myers, Dr. Michael Pearson, Dr. Doug Ensley
- Panel Discussion (in conjunction with Section NExT): Innovative Class Designs and What To Do About Them: Dr. Bernd Schroeder, Dr. Judith Covington, Dr. Connie Campbell, Dr. Doug Ensley.
- Book Exhibits: 10:00 4:00
- Student Luncheon: 11:30 12:45; Speaker: Dr. Michael Pearson.
- Plenary Session: 1:00 2:00
  - o Welcome: Northwestern State Administration
  - Keynote Address: Dr. Doug Ensley ~
     The Higher Mathematics of Eeny-Meeny-Miney-Moe
- Student Paper Competition: 2:30 5:00
- Contributed Papers: 2:30 5:00
- WebWork Workshop: 2:30 4:30; Dr. John Travis
- Revisions to By-Laws Presentation and Discussion: 3:00 4:00; Dr. Jenna Carpenter
- Banquet and R.D. Anderson Lecture: 6:00 9:00
  - Social Hour
  - o Banquet
  - o R. D. Anderson Lecture: Dr. Erik Demaine, MAA Polya Lecturer

#### Saturday, March 3

- MAA Liaison Breakfast:
- Registration: 8:00 9:00
- Book Exhibit: 8:00 11:00
- Contributed Papers: 8:00 10:00
- Outstanding Teacher Address: 10:00 11:00; Dr. Connie Campbell
- Business Meeting: 11:15 12:15
- Executive Committee Lunch and Meeting: 12:30 1:30

# Louisiana/Mississippi Section of the Mathematical Association of America



## 2012 Annual Meeting

## March 1-3 Northwestern State University

## **Registration Form**

Name:				
(as it should appear on you	ur name tag)			
Affiliation:				
(as it should appear on you	ur name tag)			
Email:				
Registration fee:	Student: \$10 Free Student	ation: \$40 (after Febru		departments which are Institutiona
Institutional Partne	rship = \$75			
Banquet and Inaug \$5 will go to the			k Demaine, \$25 per plate	
Liaison's Breakfast	t (Please check i	if you are a liaison and	d will be attending the bro	eakfast – March 3, 7:30 am)
Contribution to sup	port student act	tivities		
Total				
Please make check or mor Mail to: Frank Serio Department of M Northwestern St Natchitoches, LA	Mathematics and ate	le to LA/MS Section of Physical Sciences	of MAA	
report. To assist our sec	retary in collec	cting this data, please	e make the appropriate	nestions in the annual section selections regarding tional affiliation. (Check all tha
MAA member		Non-MA	A member	
College/University Please select the Associate	highest mathem	natics degree offered a Bachelor's	at the institution where yo Master's	ou currently teach Doctorate
High School Teach	er	Business/industry/	government employee	Retired/Emeriti
High School studer	nt	Undergraduate stu	dent	Graduate student



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

Cost per academic year: \$75
NAME OF INSTITUTION:
CONTACT PERSON:
CONTACT PERSON ADDRESS:
CONTACT PERSON E-MAIL:
CONTACT PERSON FAX:

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:

Frank Serio Department of Mathematics and Physical Sciences Northwestern State Natchitoches, LA 71497