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Louisiana/Mississippi Section of the Mathematical Association of America

NEWSLETTER—SPRING 2004 Volume 26. No. 3

Governor's Report

It's hard to believe that I've already reached the end of my term of service as Section Governor. This has been an incredible experience and I remain highly honored that you have allowed me to serve on your behalf in this capacity. The MAA is wonderful organization and my appreciation for it has only grown as I have become more knowledgeable in its many endeavors. We should be hearing soon who will serve the 2004-2007 term as ballots are due to the national office by mid-March.

Of course the MAA could not function without its dedicated membership and at this year's Section meeting we were able acknowledge some of those members. Stan Chadick, Corlis Johnson, and Tommy Leavelle were each presented with a certificate to acknowledge their 25 year membership to the MAA, and a 50 year membership certificate was presented to John Harvey. Additionally, even though the award was officially presented at the Joint National Meeting in January, we recognized Steve Ligh who was the recipient of an MAA Meritorious Service Award. The citation for that award noted, in particular, Steve's work in establishing our Section's Student Team Competition in 1988 which he ran until his retirement in 1997. This competition has grown into a great tradition for our section and it has also served as a model to other sections as well. This year we had 33 teams participate in that competition, involving 123 students. What a legacy! Please join me in expressing your appreciation to all of these dedicated members.

On a general note, PMET (Preparing Mathematicians to Educate Teachers) and PREP (Professional Enhancement Programs) are going very well, with a new series of workshops just beginning. And you should know that this year two of the PREP workshops will be hosted by institutions in our section - The University of Louisiana at Lafayette will be hosting Mathematics Meets Biology: Epidemics, Data Fitting, and Chaos, while Tulane will be hosting Statistical Ratemaking. If you have not already done so, I encourage you to take a few minutes to visit the MAA website and see all the many professional development opportunities that are available through these programs.

Additionally, the CUPM (Committee on the Undergraduate Program in Mathematics) Guide is now available online at <u>www.maa.org/cupm/</u> and a hard copy has been sent out to all department heads. This document has been four years in the making, including seeking input from various groups of constituents, and has been endorsed in principle by the Board of Governors. I hope that you will look over this document and use it to facilitate discussions in your institution and in our section on how we can better serve our students.

In closing I would like to say that serving as your Section Governor has been an honor and a privilege. We have much of which we can be proud: The level of student participation in our section meetings is high and our student competition serves as a model, our meetings continue to be well organized and informative and our members are hardworking and collegial.

If you have any concerns, questions, or ideas that you would like to share, I hope that you will not hesitate to contact me.

Respectfully,

Connie Campbell LA/MS MAA Section Governor

Letter from Randy Wills

Section Members,

It has been my distinct honor to represent you for the past year as your section chair. A highlight for me was Southeastern hosting the annual meeting this past March. The meeting was a success with more than 250 people attending including more than 130 students. I want to thank everyone who attended and everyone who worked so hard to make the meeting a success.

Students are a very important part of the section, and I want to thank all the faculty who work with students and make it possible for them to attend the annual meeting. Highlights included the first ever Integration Bee with 11 students competing, the student team competition with 33 teams competing, the student paper competition with 11 undergraduate papers and 3 graduate papers. The meeting was highlighted by a number of thought provoking talks including Dr. Joseph Gallian's keynote address and Dr.

Jenna Carpenter's talk as Distinguished Teacher of the section. Also highlighting the meeting was the inaugural class of Section NExT. Thank you to John Harvey and his committee for all their hard work in making this program a reality. Finally congratulations to James Reid who was named the Section's Distinguished Teacher.

I would also like to congratulate Dr. Roger Waggoner who was recently elected as our Section's Governor, and I would like to thank Dr. Connie Campbell for all her hard work as Section Governor for the past three years. Please contact Roger if you have any concerns you want him to bring to the national level.

My successor will be Dr. Wally Pye of University of Southern Mississippi who will be hosting the meeting next year. I am happy to see that once again it will be held on the Mississippi coast. Check the section's website for details about the meeting.

Regards,

Dr. Randy Wills

Summary of Inaugural LA/MS Section NExT Program

The LA/MS Section of the Mathematical Association of America welcomed its inaugural class of fellows into its Section NExT program at the MAA section meeting. The meeting was hosted by Southeastern Louisiana University in Hammond, Louisiana on March 4-6, 2004.

We had three Section NExT fellows this year: Barbara Gonzalez of University of Louisiana, Lafayette; Jinko Kanno of Louisiana Tech University; and William Vautaw of Southeastern Louisiana University. All national Project NExT fellows in the section were also invited to attend the sessions.

The program started on Thursday evening. The new fellows, national fellows, Section NExT committee members, executive committee members, and program speakers were invited to attend an informal reception. We wanted to allow the new fellows to mingle with active members of the section. To encourage their participation, the fellows' hotel costs were reimbursed for Thursday night.

The program Friday morning began with a panel discussion on developmental and precalculus mathematics. The discussion was led by Kathleen Lopez of University of Louisiana, Lafayette and Clifton Wingard of Delta State University . The second session was a panel discussion on calculus instruction led by Roger Wagonner of University of Louisiana, Lafayette. Assisting him was Bruce Ebanks of Mississippi State University, Jenna Carpenter of Louisiana Tech University, and John Travis of Mississippi College. Finally, Joe Gallian of University of Minnesota, Duluth, rounded out the

morning program with a discussion of how to initiate a program of undergraduate research. The fellows had lunch together and participated in the remainder of the section program that began formally Friday afternoon.

The final component of the Section NExT program was on Saturday morning. John Kenelly from Clemson University shared his thoughts on what he wished he knew when he was a young faculty member. He also presented his idea of where we are going with technology use in collegiate mathematics.

We thank the national Project NExT group and the MAA for the funding to initiate the LA/MS Section NExT.

Submitted by Jane Wenstrom



Jane Wenstrom Gives Kathleen Lopez her dot at the Section NExT reception on Thursday evening.

Student Team Competition

Student Team Competition Report March 6, 2004; Hammond, Louisiana

1. The competition exam is written and graded by a committee representing a broad cross-section of schools in this section. Members of the committee this year were:

George Cochran, Louisiana State University-Baton Rouge Robert Doucette, McNeese State University Terry Lawson, Tulane University Joe Palen, Millsaps College Edgar Reyes, Southeastern Louisiana State University Vic Schneider, University of Louisiana-Lafayette Roger Waggoner, University of Louisiana-Lafayette Randy Wills, Southeastern Louisiana State University

- Shaochen Yang, Mississippi University for Women
- 2. The committee decided to remove the Numerical Analysis category from the exam format and replace it with a category in Geometry, to take effect with next year's competition.
- 3. This year 33 student teams containing 123 students took part in the competition. Nineteen schools were represented. The median score on the exam was 57.
- 4. The top 6 teams were:
- Rank Score School
 - 6 84 Tulane Terry Lawson Sage Briscoe, Rob Blake, Timothy Daley, Thomas Cleveland
 - 5 90 Mississippi College John Travis Chris Goodin, Jerome Goddard II, Jeanann Lovell, David Willbanks
 - 4 91 Millsaps College Joseph Palen Andrew Pruett, Delilah Whittington, Nicole Walter, Daniel Walker
 - 3 92 Louisiana State University-Baton Rouge George Cochran Sam Broussard, Chrissie Fannin, Stephanie Monnin, Daniel Whitman
 - 2 108 Mississippi State University Kevin Knudson Lane Pittman, Andy Eadon, Davis Herring, Karolina Sarnowska
 - 1 118 Louisiana State University-Baton Rouge George Cochran Larkin Spires, Sean Farley, Chris Knight, Jude Melancon

Sincerely, W. George Cochran, Committee Chair

Student Paper Competition

Student Paper Competition Report March 6, 2004; Hammond, Louisiana

Eleven undergraduate students and three graduate students presented papers at the LA/MS Section Meeting.

The judges were: Danny Acosta SLU Richard Devault NW State University Lisa Galminas NW State University Xavier Retnam Blue Mountain College

The results of the undergraduate paper competition are

First Place: Don Elbers (SLU), "A Distinct Relationship Between Cubics and Tangent Lines," under the direction of Dr. Tilak DeAlwis, prize \$100

Second Place: Anne Vakarietis (NW State), "Unique Rook Circuits," under the direction of Dr. Frank Serio, prize \$75

Third Place: Clint Lovell (SLU), "General Characterizations of nxn Pythagorean Matrix Triples," under the direction of Dr. Tilak DeAlwis, prize \$50

Honorable Mention: Alexandra Lecorps (Xavier), "Using Linear Algebra to Find the GCD and LCM of Two Numbers," under the direction of Dr. Valerio DeAngelis



Sirisha Kala Receiving the First Place Award from Danny Acosta at the Business Meeting

The winner of the graduate student paper competition is

First Place: Sirisha Kala (MSU), "Deblurring Images via Partial Differential Equations," under the direction of Dr. Seth Oppenheimer, prize \$100.

Submitted by Danny Acosta, Committee Chair

First Integration Bee Held at Section Meeting

The Integration Bee event was designed and conducted by Tilak DeAlwis of Southern Louisiana University. It was held on Thursday evening, March 4, 2004. The winners and their institutions are as follows:

First Place: Delilah Whittington, Millsaps College Second Place: Daniel Walker, Millsaps College Third Place: Tia Brabham, Millsaps College, and Andrea Caballero, Loyola University (tied)

Submitted by Tilak DeAlwis



The winners of the Integration Bee are from left to right Delilah Whittington, Daniel Walker, Tia Brabham, and Andrea Caballero.

Outstanding Teacher Award

Report from the 2004 LA/MS MAA Outstanding Teacher Award Committee

Nominations were solicited from the section via email by John Travis and forwarded to Chair, Jenna Carpenter. The Committee consisted of Carpenter, Kathleen Lopez and John Travis (who temporarily replaced Wally Pye, Mississippi Representative, since Wally made one of the nominations). The Committee reviewed and discussed the nominations. It was observed that the nominations were again excellent. The Committee unanimously recommended Dr. James Reid from Ole Miss as this year's award recipient. As the 2004 LA/MS MAA Section Outstanding Teacher Award winner, Dr. Reid will be automatically nominated for the 2005 national MAA Haimo Award for Distinguished College or University Teaching of Mathematics.

The Committee did observe that there needed to be additional clarification regarding what materials needed to be submitted for the section award nominations and that there needed to be an earlier deadline (in December or January) to provide additional time for the committee's deliberations. In addition, it was observed that an earlier deadline would allow the committee to purchase a plaque to present to the award winner at the Section meeting. The Committee suggested that these recommendations be implemented for the 2005 nomination cycle.

Jenna Carpenter, Chair

LA/MS MAA Outstanding Teacher Award Committee

Mathematical Concerns Committee

On Saturday March 6, 2004, at 7:45 a.m. the Mathematical Concerns Committee met at our Annual Section Meeting to discuss concerns of our Section.

Those in attendance are as follows: Clifton Wingard, Stan Chadick, Shao Chen Yang, Grace Cascio-Houston, John Houston, and Phil Quartararo -Committee Chair.

The concerns expressed were as follows:

Salaries – This has been a concern since the Concerns Committee was initiated quite a few years ago. The main factor discussed here is salaries in Departments of Mathematics as compared to the higher salaries in academic areas such as Accounting, Computer Science, Engineering, etc. which have accrediting agencies specific to their disciplines which, among other things, require certain levels of salaries for their faculties in order for their programs at an institution to be accredited. We have no solutions to suggest for this problem, but we want to keep it on the minds of our members somewhat in keeping with a longstanding tradition in our discipline of publicizing great unsolved problems

with the hope that someone, at some time, some where might get a brilliant idea about how to go about solving it.

Quality of Instruction – The focus here was on new hires, including TAs and Adjuncts, although new hires is not the only areas where there are such problems. Project Next helps considerably by orienting its participants very well from many points of view. However, there is a need in departments to orient new faculty members in a formal way and also to monitor their activities in a manner that helps steer them in the direction desired by the department. Some departments do this, and in fact do it quite well, but others perhaps could do more along these lines.

Material Being Used in Instruction – Text book material has been changing considerably lately, especially in our lower level courses (let's say the first two years), generally for the better, and these changes are motivated by the generally poor results we've been getting from those courses (examples: College Algebra, Calculus, etc.). Caution is suggested to choose new "reformed" material wisely to try to assure attaining the improved success which is desired. Be aware of some of the very good new material developed and being used in our Section. Much quality time is being spent in our Section on these problems and some success is being realized.

<u>More Majors</u> – A concern was expressed about the number of mathematics majors in our section, and nationally, being quite small. CUPM's Guidelines which seem to have the potential for a very positive impact on the appreciation and quality of understanding students have for mathematics, and the number of students selecting mathematics as their major or minor ... should be applauded. Everyone is encouraged to study those Guidelines and try to follow as much of them as is feasible on your campus. Let's try to stimulate growth in our discipline. Also, for our departments to get the kind of support we desire, number of majors can be a significant factor.

<u>Math Ed Majors</u> – Departments are encouraged to continue to work on their campuses to try to help improve the quality (especially mathematically) of their Math Ed graduates. There are still many problems in our school systems, and there is much need for quality mathematics instruction as well as leadership there among the teachers. Society has much to be gained by our continued innovative efforts in this area, and obviously our colleges and universities do also. Let's keep in mind that these future teachers will play a huge role in developing the quality of our incoming students, which includes their desire to major and/or minor in mathematics ... and in general their understanding and appreciation of mathematics.

Mathematics Departments Being Merged with Other Departments – On campuses where this is being considered or where it has already been done, our concern is that a strong effort should be made to have assurances that quality leadership will be provided to lead especially the mathematics part of the program so that it is not neglected from a lack of interest or knowledge on the part of the department leader.

Large Institutions Pushing to Have More Students Taught by Ph.D. Holding Faculty Members – Although in theory this is a laudable concept, our concern is that in trying to make this financially feasible, class sizes may have to be increased considerably, and as a result students may suffer rather than benefit from these changes. Also, many excellent dedicated instructors for lower level classes may be lost in such a move, which may also be detrimental to the quality of instruction the students

receive in certain courses.

On Line Courses – Concerns were expressed about the ability to assure the quality of the learning experiences with this approach to instruction. We are aware of the flooding of the Internet with on line courses and even degrees being offered, and the need to keep ourselves in the market place by continuing to try to reach and attract more students. We are also aware that it is possible that cost factors can be lowered with this mode of instruction. However, can we still provide a quality learning experience in this manner? Have we developed and are we using appropriate assessment tools to assure this quality? Hopefully we will not be forced into this approach at the possible expense of the quality of the results.

Submitted by Phil Quartararo, Committee Chair

Location and Nominations Committee

Location and Nominations Committee Report March 6, 2004; Hammond, Louisiana

- Section Chair Wally Pye of University of Southern Mississippi
- Louisiana Vice-Chair for La Jenna Carpenter of Louisiana Tech

Mississippi Vice-Chair – Seth Oppenheimer of Mississippi State University Newsletter Editor – Clifton Wingard of Delta State University

Submitted by Roger Waggoner, Committee Chair

In Memoriam

Two colleagues were remembered during the business meeting.

Dr. John Hildebrant taught mathematics at Louisiana State University from 1966 until his retirement in 2001. He died unexpectedly on June 3, 2003, at the age of 67. John, a native of Bartlesville, Oklahoma, graduated from the University of Oklahoma, and he received his PhD from the University of Tennessee. In addition to his teaching responsibilities at LSU, he served three terms as the Associate Chairman of the LSU Mathematics Department. He received the LSU Alumni Foundation President's Award in 1999. He is survived by his wife Sarah and two daughters, Diane and Laura. (Taken from John A. Hildebrant's obituary which appeared in the Semigroup Forum.)

Dr. Sam Knox taught mathematics at Millsaps College from 1949 until 1988, serving as chairman of the mathematics department for 23 years. He was a native of Water Valley, MS where his wife Dot still resides. Sam received his B.A and M.A. from the University of Mississippi, and his Ph.D. from Virginia Polytechnic Institute. He was active in the MAA and, during his tenure at Millsaps, received numerous awards in recognition of his service and teaching. The Millsaps Department of Mathematics has established an award in Dr. Knox's honor which is presented annually to the outstanding senior mathematics major.

Resolutions Committee

Be it resolved that we express our appreciation to Dr. Carolyn Sonniet, Executive Assistant to Southeastern LA University President Dr. Randy Moffett and to Dr. Tammy Bourg, Dean of the College of Arts and Sciences at SLU for their warm welcome and hospitality and to Section Chair Dr. Randy Wills for this well-planned and well-executed meeting.

Be it resolved that we express appreciation to the Department of Mathematics at SLU as well as to the support staff and to the students of SLU for the excellent job they have done hosting this annual meeting. Special thanks are extended to Danny Acosta, Ana Wills, Alan Cannon, Kent Neuerburg and Susan Jenkins.

Be it resolved that that we express gratitude to Dr. Joe Gallian for taking us on a "tour of a torus" and to Dr. Lew Lefton for entertaining us with an "infinite" number of jokes.

Be it resolved that we appreciate the faculty members and the students who made presentations for our enlightenment and to those students who participated in the team and individual competitions and to their faculty coaches.

Be it resolved that we express appreciation to the CUPM panel members: Michael Pearson, Connie Campbell, Kathleen Lopez and Asmy Ackleh and to our MAA representatives Michael Pearson and John Kennelly and to the publishing company representative for the exhibits.

Be it resolved that we express our appreciation to all of the LA-MS committees for their part in ensuring the success of this meeting and last but not least to the membership of the LA-MS section of the MAA for their participation in this meeting and their continued support of the section.

Therefore, Be it resolved that the 81st annual meeting of the LA-MS section of the MAA held on March 4-6, 2004 in Hammond, LA at Southeastern LA University was a great success.

Respectfully submitted:

Resolutions Committee Martha Goss Mark Schlatter Grace Cascio-Houston, Chair



Business meeting--March 6, 2004

LA/MS MAA Section Treasurer's Report March 2004

Balance February 10, 2003	\$6,906.68
Receipts: MAA Subvention 2003 Meeting Receipts Interest (March 2003-February 2004) Institutional Membership MAA Book Sale	600.00 6690.80 53.30 50.00 28.89
Total Receipts:	7422.99
Expenses: Student Awards 2003 Meeting Expenses Newsletter Executive Committee Travel 2004 Meeting Start-Up Checks for new treasurer	450.00 5313.37 162.80 355.84 500.00 14.60
Total Expenses:	6796.61
Balance March 7, 2004	\$7533.06
Account Information: City Bank& Trust Company Natchitoches, LA 71457 Account Number 42-9489-0 Tax ID Number: 16-0743079	
Submitted By: Judith Covington, Secretary/Treasurer Department of Mathematics Louisiana State University Shreveport Shreveport, LA 71115 icovingt@pilot.lsus.edu	

Mark your Calendars!

The Section meeting will be held March 3 - 5, 2005, and will be hosted by the University of Southern Mississippi.