

# Louisiana/Mississippi Section of the Mathematical Association of America

NEWSLETTER—FALL 2005 Volume 28. No. 1

#### **Contents**

Letter from Jenna Carpenter—Section Chair1
Letter from the Section Governor2
Section NExT2
News from around the Section2
Project NExT Announcement 7

# LETTER FROM JENNA CARPENTER—LA/MS SECTION CHAIR

Make plans now to attend the 2006 Louisiana-Mississippi MAA Section Meeting February 16 – 18, 2006 at Louisiana Tech University in Ruston. MAA President Carl Cowen will be delivering our Opening Invited Address and Dr. Aparna Higgins will be the featured speaker for the Section NExT/Project ACCCESS sessions (have you nominated your new faculty for Section NExT?). Bring your students to participate in the Integration Bee (with cash prizes!) on Thursday evening and the Student Team Competition on Friday. Dr. Higgins will be speaking at the Student Luncheon on Friday, as well. Friday evening, come socialize at the Fais-Do-Do, featuring Louisiana cuisine and our faculty mograss (that's short for Motown/Bluegrass) band, Back Porch. There will be sessions on the latest web technology and software for your courses, as well as a Special Contributed Paper Session on Math and Biology and an expanded Exhibits Room. We have already secured a great selection of books for the ever-popular MAA Book Sale, as well. New this year, Institutional MAA Section Members qualify for free exhibit space to advertise their graduate programs. Contact Jenna Carpenter at jenna@coes.latech.edu for more information. See you there!

# LETTER FROM THE SECTION GOVERNOR

This year's MathFest, held August 4-6 in Albuquerque, was as usual rewarding and a lot of fun. It provided an opportunity to make new acquaintances, renew some old ones, and to attend some excellent talks. I especially enjoyed the invited addresses given by Underwood Dudley and Robert Devaney. The Board of Governors meeting was again long but interesting, with spirited discussions on the selection process for meeting sites and some of the Haimo Award regulations. The MAA is committed to the concept of continuous strategic planning. The next three working groups will issues dealing address with Students. Governance, and Membership. The report from a current group devoted to Revenue sparked another spirited discussion of the organization's dues structure. On a very positive note, the MAA's book sales continue to grow, and to provide an important revenue source. Sales this year are running ahead of 2004, which was an all time record year. Online sales through Amazon and through MAA Online are both strong. In general, the national organization is lean and healthy.

The storms of this year have to varying degrees had adverse effects on everyone in our Section. Some of our members have for a time lost their places of work. It is likely that some of us have lost homes. There are currently severe restrictions on state funding for equipment, supplies, and travel. Our Section meeting is scheduled to be held in February at Louisiana Tech. Jenna Carpenter and Galen Turner are doing a great job of planning this meeting. I am excited that Aparna Higgens and MAA President Carl Cowen will be the invited speakers. In spite of all the terrible adversity, it is my sincere hope that I will see many of you in Ruston. I am confident that in the long run our Section will continue to thrive.

Roger Waggoner

#### **SECTION NEXT**

New faculty are invited to apply to become LA/MS Section NExT Fellows. LA/MS Section NExT is a professional development program that is modeled after the national Project NExT program. Section NExT Fellows attend the LA/MS Section meeting where there will be programming designed specifically for them. To be eligible to apply, faculty must have at least a master's degree in mathematics and be in their first three years of full-time teaching at a 2-year or 4-year institution in the LA/MS Section. More information, including the online application form, can be found http://www.mc.edu/campus/users/travis/maa/nex t/index.html.

The application deadline is November 15, 2005. (Submitted by Jane Wenstrom, Section NExT Coordinator)

# NEWS FROM AROUND THE SECTION

# **Alcorn State University**

Dr. Keith Alford retired from Alcorn State University on June 30, 2005. He served Alcorn State University for 32 years. Dr. Alford held the position of Chair of Math Dept from 2000 to Dr. Mokhtar Aouina joined Alcorn 2004. State University as an Assistant Professor. Dr. Aouina, an algebraic topologist, is a graduate of Wayne State University, MI (2005). Dr. Yuan Li joined Alcorn State University as an Assistant Professor. Dr. Li, a number theorist, is a graduate of SUNY, Buffalo( 2005). Ravinder Kumar took over the responsibilities of liaison between Math Dept at Alcorn State University and MAA (LA/MS) from Dr. Keith Alford, who retired. Dr. Kumar made presentations in Computer Technology and PDA's at ICTCM (International Conference on Technology in Collegiate Mathematics) 2004 in New Orleans, and a presentation and a workshop in Computer Technology at ACTM (Asian

Conference on Technology in Mathematics) 2004 in Singapore. Funding was received from HBCU-UP program and Department of Mathematics. A second HBCU-UP grant was awarded to Alcorn State University in 2004. Dr. Kumar is its database manager. Dr. Sidnev "Inequalities Hawkin's paper Between Algebraic Ranks and Pythagoras Numbers in Witt Rings of Fields" was accepted for publication in the Journal of Linear Algebra and its Applications. This research paper is a major part of Dr. Hawkins' dissertation. Dr. Hawkins is an associate professor in the department of mathematics at Alcorn. Mrs. Kanchan Manaktala made presentations in Graphing Calculutor Technology at ICTCM 2004 in New Orleans and ACTM 2004 in Singapore. Funding was received from Department of Mathematics.

A departmental retreat to discuss important issues was held on August 18-19, 2005. This retreat, first ever in Math department, focused on some important issues related to planning in the department, and was a great success. (Submitted by Dr. Ravinder Kumar)

#### Belhaven College

Belhaven College welcomes **Dr. Georgia**Miller and Miss Jenelle Jefferson to the Mathematics faculty for Fall Semester 2005. Dr. Miller came to us from Hinds Community College, Rankin Campus. Miss Jefferson comes to us immediately after completing a Master's in Operations Research at North Carolina State University. She is a former Belhaven student. **Dr. Robert Jones** continued as an adjunct faculty member through Spring 2005, and **Dr. Geraldine Roberts** retired at the end of Spring semester. (Submitted by Janie Smith)

### **Delta State University**

**Robert Waller** retired from Delta State University in May 2005. **Mack Smith** has joined the Department of Mathematics as an instructor.

Rose Strahan and Stella Wear conducted a summer geometry and algebra workshop during

the month of June for teachers in grades 5-8. Nineteen teachers from twelve different schools in the Mississippi Delta participated in the program. This workshop was funded by the No Child Left Behind Program of the Mississippi Institutions of Higher Learning.

## Louisiana State University - Alexandria

We have one new mathematics faculty member: **Ms. Tanya Melton**.

For about two days during Hurricane Katrina we had high winds and rain. Most of the people here were without power for several days. There was not much damage but in some places trees and power poles fell down. We did not have classes the Friday before and the Monday after the Hurricane. (Submitted by Syrous Marivani)

# Louisiana State University—Baton Rouge

One Xavier University professor is working for LSU as a temporary instructor: **Tommy Palfrey**, Associate Professor of Mathematics at Xavier (tpalfrey@math.lsu.edu). LSU also has three graduate students who were evacuated from the New Orleans area. (Submitted by George Cochran)

#### Louisiana Tech

We have two new faculty, a husband and wife team. **Dr. Katie Evans** joins us as an Assistant Professor of Mathematics. She earned a Ph.D. in Mathematics at Virgina Tech in 2003, and she had since been at Oregon State University. Her research specialty is in Control Theory. **Dr. Brian Camp** joins us as a Visiting Assistant Professor of Mathematics. He earned a Ph.D. in Mathematics at Virginia Tech in 2003, and he had since been at Oregon State University. His research specialty is in Numerical Analysis, and he also has experience in developing educational materials.

**Dr. Weizhong Dai**, our leading numerical analyst, was promoted to full professor. (Submitted by Bernd S. W. Schroeder)

# **Mississippi State University**

Jane L. Harvill and Kevin P. Knudson have been promoted from assistant professor to associate professor. Marjorie Crittenden has been named an instructor of mathematics. She has been working as a lecturer in the department and had previously taught at and holds an Ed.S. from the University of Alabama at Birmingham. Seongjai Kim has been named an associate professor of mathematics. Dr. Kim, a specialist in numerical analysis, holds his Ph.D. from Purdue University and masters and bachelors degrees from Seoul National University. He previously taught at the University of Kentucky.

Eight students from colleges and universities across the country successfully completed a prestigious summer research program in applied mathematics at Mississippi State that concluded on August 5, 2005. The REU program is supported by a grant from the NSF. Additional funds are provided by the offices of the provost and the vice president of research, and the dean of the College of Arts and Sciences.

World-renowned mathematician, Dr. Louis Nirenberg, of New York University spoke at the sixth annual MSU-University of Alabama-Birmingham Conference on Differential Equations and Computational Simulations on May 13 and 14 at Mississippi State University. Other conference speakers included Margaret Cheney of the Rensselaer Polytechnic Institute in New York; Lawrence Delucas of UAB; Thomas Yizhao Hou of the California Institute of Technology; Mark Lewis of the University of Alberta (Canada): Fang-Hua Lin of the Courant Institute; Jean Mawhin of the Catholic University of Louvain (Belgium), Robert Meakin of the U.S. Army-NASA Ames Research Center at Moffett Field, Calif.; and Klaus Schmitt of the University of Utah.

The Mathematics Department hosted a onemonth summer program in mathematics and language instruction for the Algebra Project in

July 2005. Thirty-one African-American students from Lanier High School in Jackson, Mississippi, stayed on the campus of Mississippi State University for a number of educational The founder and leader of the activities. Algebra Project, Dr. Robert P. Moses from Cambridge, Massachusetts, addressed a group of 120 students, parents, faculty, and campus officials at the banquet of this program. The summer program was organized by Michael M. Neumann, the interim department head, and supported by the Center for Urban Education and Innovation at Florida International University, the Algebra Project, and Mississippi State University.

Mississippi State's department of mathematics and statistics is taking a byte out of the challenge to master algebra. Dubbed Math Domain, the recently opened facility features nearly 100 computers at which students complete class assignments and take quizzes and tests. The center is open 50 hours each week so participants can pace their own learning, said interim department head Michael Neumann. Neumann said MSU's computer-based learning is "a multiple step approach," which he described as a hybrid of its predecessors. The new approach combines two hours of classroom lecture with two hours of math laboratory at the center. MSU's Math Domain is equipped with tutors to help students when they do not understand homework problems. (Submitted by Seth Oppenheimer)

#### Northeast Mississippi Community College

Mrs. Melba Morgan, Math and Science department chair, retired in June 2005. Mrs. Kay Crow was named our new Department Chair. Mrs. Mary Lou Beckman, Ms. Melanie Roby, and Ms. Amy Marolt have joined the faculty at Northeast Mississippi Community College. (Submitted by Andrea Mathis)

### **Northwestern State University**

**Dr. Stan R. Chadick** was selected as the 2005 recipient of the President's Distinguished Service Award at Northwestern State University.

He was recognized during the homecoming festivities at NSU. Stan will be retiring in December 2005. He has been teaching at Northwestern since 1969 and served as the head of the Department of Mathematics from 1978-83. He was curriculum coordinator for the Louisiana School for Math, Science and the Arts from 1983-85 and was director and fellow of the Louisiana Scholars¹ College from 1986-87.

**Dr. Richard DeVault** was one of six outstanding educators at Northwestern State University who were recognized at homecoming for their contributions to the university and their individual colleges as recipients of this year's NSU Excellence in Teaching Awards. (Submitted by Stan Chadick)

# **Southeastern Louisiana University**

The Department of Mathematics and Southeastern Louisiana University hope that all affected by Hurricanes Katrina and Rita are safe. Several members of our department sustained damage from Katrina, but all faculty are safe and all have returned to work here. The university was lucky that we did not lose very many students due to the storm, and we picked up more than 1000 students from other universities.

The past year has been very busy for the department. In July, we welcomed **Dr. Timothy Hudson** as our Department Head. Dr. Hudson received his Ph.D. from Texas A&M, and comes to us from East Carolina University. Dr. Hudson's area of research is Operator Algebras. The department also welcomed **Dr. Zach Teitler** to the department as a new Assistant Professor. Dr. Teitler received his Ph.D. from the University of Michigan where he studied Algebraic geometry.

The department has several displaced faculty working for us. They are **Richard Sasser**, **Donald Harwood**, and **Phillip Reppel** from Delgado Community College and **Christine Thomas** and **Cheryl Thomas** from Nunez Community College.

The department recently received a Board of Regents Grant to support our Colloquium Series.

Anyone interested in presenting, please see the department's website for more information.

Finally, the university was one of eleven universities nationwide chosen to participate in an NSF grant on College Algebra Reform. (Submitted by Dr. Randall Wills)

# University of Louisiana at Lafayette

Wayne Andrepont has been promoted to the rank of Professor. Patricia Beaulieu and Kathleen Lopez have received tenure-approval. Keng Deng is serving as Graduate Coordinator. Arturo Magidin has been hired as Assistant Professor. Robert Rioux and Scott Sorrell have been appointed as Instructors. Bryant Chow, a retired Professor, passed away in Mobile, Alabama, on September 9.

Azmy Ackleh has received funding from the NSF's Undergraduate Biological Mathematics program to develop an undergraduate option in mathematical biology for mathematics and biology majors. This is being implemented with cooperation from the Biology Department and the National Wetlands Center. It follows a two-year NSF-supported pilot project.

**Kathleen Lopez** is organizing a workshop, "Mathematical Content for PK-8 Teachers", to be held on campus May 22-25, 2006. Faculty from all Louisiana institutions of higher education with an elementary or middle school program are invited. Community/two-year faculty are especially encouraged to apply. Participants will receive allowances for meals, lodging, and travel, plus a stipend.

An MAA PREP workshop devoted to mathematical biology was held on campus last May. Azmy Ackleh and Sophia Jang were the organizers and primary presenters, with assistance and additional support from Tom Banks of SAMSI and North Carolina State. This was the second such workshop hosted by the department.

Vic Schneider, Lee Price, Cat McKay, and Mary Lou Jumonville are wrapping up a LaSIP sponsored project for grades 4-10 teachers. The

project began with three weeks of intense work in July.

In the academic year 2004-05, eight students graduated with PhD's. Enrollments in graduate and upper-level undergraduate courses are again up from the previous year.

In the wake of Hurricane Katrina, the University enrolled almost 700 displaced students. About 280 of these students signed up for mathematics courses. Several mathematicians and staticians from New Orleans have spent parts of the fall in the Lafayette area. These include **Ralph Tucci** of Loyola, **Jim Rogers** and **Sudesh Srivastava** from Tulane, **Tumulesh Solanky** of UNO, and **Vlajko Kocic** and **Donna Stutson** of Xavier. Tucci, Srivastava, and Solanky gave colloquia while they were here. (Submitted by Roger Waggoner)

# **University of Southern Mississippi**

**David Betounes** retired last May after 25 years of service. **Wally Pye** resigned as chair effective June 30 after having served for 16 years. **Chingshyang Chen** (C.S.) is the new chair. He comes from the University of Nevada at Las Vegas where he led an applied research group. His degrees are as follows: B.S., National Cheng-Kung University; M.S., University of Southern Mississippi; Ph.D., University of Louisiana at Lafayette.

We have been given permission to conduct searches this year for up to three people at the assistant to associate professor level. Our webpage contains more information if anyone who is interested. (Submitted by Wally Pye)

### **Xavier University**

In the aftermath of hurricanes Katrina and Rita, the Xavier University of Louisiana Department of Mathematics along with the entire University has plans to reopen in January 2006. More information can be found at http://www.xula.edu. (Submitted by Valerio Deangelis)

Mark your calendars! LA/MS Section Meeting February 16 - 18, 2006

# SPONSOR A PROJECT NEXT FELLOW



**Project NEXT (New Experiences in Teaching)** is looking for Individuals, Departments, Universities, MAA Sections, Organizations, Businesses to sponsor a Fellow(s) for a year plus program that helps new and recent Ph.D.s in the mathematical sciences make the transition from graduate student to full-time faculty.

#### Sponsorship means:

Professional development

Recognition among recent Ph.D.s

Opportunity to become active in the profession

Job enhancement and support

**E**lectronic networking

Collegiality

Teacher enhancement

through New

**Ex**periences in

Teaching

COST:

\$2500 per Fellow

Fellows attend workshops at three national meetings and network electronically with peers and mentors. Their institutions pay the travel costs; sponsorship pays the program costs.

For additional information on this opportunity, please contact:

**Chris Stevens**, *Director*, Project NEXT Program, MAA STEVENSC@SLU.EDU

**Lisa Kolbe,** *Development Specialist,* MAA lkolbe@maa.org 202-293-1170