

## Table of Contents

Section Calendar .....	2
From the Chair .....	3
From the Governor .....	4
Fall Executive Committee Meeting .....	7
Call for Nominations for Distinguished Service Award .....	11
Announcements .....	12
News from the Campuses .....	15
Meeting Information .....	Center

The Newsletter is published in April and November each year. The deadlines for items to be included in each issue are March 15 and October 15 respectively. Departmental News appears in the November newsletter only and is solicited from department liaisons. Full page ads are available for graduate programs and for corporate ads. Quarter page ads are available for position advertisements. Contact the advertising manager for details.

Material may be submitted to the editor on paper, by email, or on 3.5" diskette, electronic forms are preferred. Currently the newsletter is produced using Microsoft Publisher, which can import plain text files or files produced by most word-processing software.

**Editor:** Virginia Watson, Department of Mathematics, Kennesaw State University, Science Bldg #12 Room 507 Box 1204, 1000 Chastain Rd, Kennesaw, GA 30144-5591; phone (770) 423-6459, fax (770) 423-6629, [vwatson@kennesaw.edu](mailto:vwatson@kennesaw.edu).

**Advertising Manager:** Karen O'Hara, Department of Mathematics and Computer Science, High Point University, University Station, Montlieu Ave, High Point, NC 27262-3598; phone (336) 888-6385; [kohara@linus.highpoint.edu](mailto:kohara@linus.highpoint.edu).

## Section Calendar

November 18-21, 2004	AMATYC Annual Meeting, Orlando, FL
January 5-8, 2005	MAA/AMS Annual Meeting, Atlanta, GA
<b>March 11-12, 2005</b>	<b>Southeastern Section MAA, Raleigh, NC</b>
April 6-9, 2005	NCTM Annual Meeting, Anaheim, CA
August 4-6, 2005	MathFest: Albuquerque, NM
November 10-13, 2005	AMATYC Annual Meeting, San Diego, CA
January 12-15, 2006	MAA/AMS Annual Meeting, San Antonio, TX
<b>March 24-26, 2006(tentative)</b>	<b>Southeastern Section MAA, Auburn, AL</b>
April 26-29, 2006	NCTM Annual Meeting, St. Louis, MO
August 10-12, 2006	MathFest: Knoxville, TN
November 2-5, 2006	AMATYC Annual Meeting, Cincinnati, OH
January 4-7, 2007	MAA-AMS Annual Meeting, New Orleans, LA
March 21-24, 2007	NCTM Annual Meeting, Atlanta, GA
August 3-5, 2007	MathFest: San Jose, CA
November 15-18, 2007	AMATYC Annual Meeting, New Orleans, LA
January 6-9, 2008	MAA-AMS Annual Meeting, San Diego, CA
April 9-12, 2008	NCTM Annual Meeting, Salt Lake City, UT
July 31–August 2, 2008	MathFest: Madison, WI
November 20-23, 2008	AMATYC Annual Meeting, Washington, DC
January 7-10, 2009	MAA-AMS Annual Meeting, Washington, DC
January 6-9, 2010	MAA-AMS Annual Meeting, San Francisco, CA
January 5-8, 2011	MAA-AMS Annual Meeting, New Orleans, LA



## From the Chair

November is here again: the clocks have turned, the electorate spoken, leaves are falling, the MAA membership renewal letter has arrived (perhaps for the second or third time), as has the MAA Fall/Winter announcement of new books and bestsellers, and---in case you missed it---MAA Online celebrated "section alumnus" Martin

Gardner's 90th birthday (October 21) with the present of a new mathematical card trick, courtesy of Spelman's Colm Mulcahy.

Dan Teague of the North Carolina School of Science & Mathematics is the MAA Governor at-large representing high school teachers. Dan has been spearheading the organization of a SIGMAA for high school teachers of advanced mathematics. Dan organized two excellent sessions at the Providence MathFest in August and is developing three Saturday sessions (on calculus, statistics, and math teams) for our spring meeting at Meredith. See the announcement of the Meredith meeting (March 11-12, 2005) on the center insert of this newsletter for other highlights of a great meeting. Don't miss it!

Your undergraduate Math Jeopardy teams will have two chances to compete this year! This popular event was introduced to our section by SIAM Southeast Atlantic Section during our joint meeting at Clemson in 2003, and reprised this past spring during our meeting at Austin Peay. We will again host Math Jeopardy at Meredith, and SIAM-SEAS will also host a competition at their meeting in Charleston two weeks later. We are grateful to SIAM's Michael Berry (UT-Knoxville) and our own John Harris (Furman) for forging a cooperative Math Jeopardy arrangement between SIAM-SEAS and MAA-SE.

Project NEXt-SE is recruiting a new class to begin at the Meredith meeting. They will be joined by our section's three members of the inaugural class of Project ACCESS (Advancing Community College Careers: Education, Scholarship, and Service, jointly sponsored by AMATYC and MAA) fellows. Please encourage eligible faculty to visit the Project NEXt-SE link off our web page (see "Section Information" at [www.maa.org/southeastern](http://www.maa.org/southeastern)) for application information.

I will be concluding my term as Section Chair with the Meredith meeting. It has been a privilege and a treat to work with the many fine people in our section. I thank you for this opportunity and look forward to the leadership of Charlotte Knotts-Zides.

**Stephen Davis**



## From the Governor

What follows is a brief report on what I learned at this summer's MathFest. The event took place in Providence, Rhode Island. The city was threatened by one of the first hurricanes of the season during the meeting, but luckily the threat was largely empty. We got more than a little rain as the meeting ended, but there was no damage or even any delayed flights.

Providence was a great location for MathFest. The city offers lots of interesting restaurants and things to do. A small delegation from the Southeastern Section went up to Boston to take in a Red Sox game at Fenway. Regrettably, the delegation did not include your Governor,

During the Board of Governor's meeting, which was held the day before the meeting formally began, we learned from MAA President Ron Graham that the MAA is now actively lobbying in Washington directly, rather than working through the Joint Policy Board for Mathematics. Ron himself met with a subcommittee of the House Appropriations committee. He also met with the acting director of the National Science Foundation.

Then, we learned from MAA Executive Director (and former member of the Southeastern Section) Tina Straley, who has been on the job in Washington for almost five years now, that she has just signed another five year contract. This good news was well received, to put it mildly. The Board got some more good news later in the meeting when it learned that our capable Secretary, Martha Siegel has agreed to serve another five-year term. The Board acted quickly to reelect her before she could even think about changing her mind.

In her report as Executive Director, Tina noted that fundraising is an increasing focus in the national office; she noted, pointedly, that an increasing number of MAA members are including the MAA in their wills. In a subsequent session, Tina suggested that a person who wants to make a contribution to a particular Section of the MAA [the Southeastern Section, for example] can send a check with an appropriate designation to the national office and be sure that the funds will get to the section and that the donor will get an official receipt for tax purposes. I encourage you to give this a try.

Tina also reminded the Board of Governors that the Washington MAA office will handle all of the arrangements for next year's MathFest directly, rather than work through the AMS, and she anticipates significant cost savings. She announced that next year's MAA trip would be to Mexico with focus on Mayan mathematics. She concluded by noting that there are twenty-six people on the staff in the national office. In my opinion, the membership gets a lot of work out of this small staff.

Our own John Kenelly and his colleagues on the Audit and Budget committees assured the Board that the MAA is on sound financial footing. We passed our last audit with flying colors, and thanks in large measure to new leadership in the Department of Finance in the national office, our financial problems of the past are well behind us.

Vice President Barbara Faires announced that the national organization was initiating a strategic planning process. The first step will be to appoint a steering committee which will present a plan for the process to the MAA Executive Committee, and presumably subsequently to the entire Board of Governors, at the 2005 Winter Meetings. You should expect to see more about this in the next report.

Director of Publications, Don Albers, reported that book sales in 2004 are on their way to a new record. He noted in particular that Classroom Resources materials were leading the way. Don encouraged the governors to check out the newly refurbished MathDL and the expanded offerings of on-line reviews. T. Christine Stevens gave a report to the Board on the status of Project NExT. A new class of seventy-one fellows had just been selected, the eleventh class in all. Chris noted that there are now ten separate organizations sponsoring this key program, although Exxon-Mobil's commitment to the program is waning.

Other reports to the Board revealed that membership is steady with Institutional Memberships up slightly and that the renovation of the Carriage House is about to begin using funds provided by Paul and Virginia Halmos.

I need to report on one notable event at MathFest, organized by Dan Teague, a member of the Board of Governors, from the North Carolina School of Science and Mathematics. Dan put together a pair of workshops for AP Calculus Teachers. Dan ran one of these, on modeling, himself and the other was a tag-team effort featuring David Bressoud, Chair of the AP Calculus Test Development Committee, and your Governor. All those who participated hope that there will be events like this for AP teachers at every MathFest, and a number of those present expressed interest in a SIGMAA (MAA special interest group) aimed at MAA members with interests in secondary level mathematics. If you are interested in learning more about this SIGMAA, please get in touch with either Dan or me.

Finally, I want to thank each of you again for allowing me to serve as your Governor. I hope that if you have questions or concerns about the national organization, you will feel free to get in touch.

**Ben Klein**

## Announcing a New Class of Project NExT-SE

Project NExT (New Experience in Teaching) is a national program for new or recent Ph.D.s in the mathematical sciences who are interested in improving the teaching and learning of undergraduate mathematics. Project NExT-SE is the Southeastern Section's version of the program. Non-tenured, Ph.D. holding faculty members in our section are invited to apply to become Project NExT-SE Fellows.

The first meeting for the NExT-SE Fellows will be March 10-11, 2005, at Meredith College, just prior to the annual section Meeting. At this workshop, participants will discuss topics of special relevance to beginning faculty. Topics could include

- New approaches to teaching calculus, pre-calculus, and more advanced courses;
- Alternative methods of teaching and assessing student learning;
- Using technology in the classroom;
- Perspectives from pedagogical research;
- Writing grant proposals;
- Balancing teaching and research.

NExT-SE Fellows will remain in contact with one another via an electronic network, and a second meeting will take place in the spring of 2006.

For information and to apply on-line, please see the NExT-SE web page:

<http://math.highpoint.edu/NExT-SE/>

The deadline for applications is January 10, 2005. Fellows will be contacted no later than January 24, 2005, regarding their acceptance into the program.

Address all other inquiries to

Julie Barnes, [jbarnes@email.wcu.edu](mailto:jbarnes@email.wcu.edu), 912-681-5706

Rob Harger, [rharger@highpoint.edu](mailto:rharger@highpoint.edu), 336-841-9659

Pat Humphrey, [phumphre@GeorgiaSouthern.edu](mailto:phumphre@GeorgiaSouthern.edu), 828-227-3943

Charlotte Knotts-Zides, [knottszidesca@wofford.edu](mailto:knottszidesca@wofford.edu), 864-597-4534



## Fall Executive Committee Meeting

The Executive Committee of the Southeastern Section held its fall meeting on the campus of Davidson College, September 24-25, 2004. The meeting was graciously hosted by Section Chair Stephen Davis, who, after welcoming the group and introducing the members, discussed the Section

Officers Meeting at MathFest 2004. Topics included: ways for using section funds, the "In Memoriam" section in Focus, the Section Officers Guide on the [maa.org](http://maa.org) website, the offer by CUPM to hold a workshop at the spring meeting, the connections between Project NEXt and Project ACCESS, the status of Math Jeopardy, an overview by the Chair of the Committee on American Mathematics Competitions (where volunteers are needed), outreach opportunities to new members being attempted by the national office, a report from MAA Executive Director Tina Straley who inquired what the national office can do for the sections, a report by MAA Treasurer John Kenelly on the solid financial status of the organization, a report by the chair of the Committee on Sections, Nancy Hagelgans, requesting that sections make sure to include two-year college and high school faculty and students in section activities, and an Open Forum in which participants discussed such issues as gifts for liaisons, selling MAA materials in addition to books at Section meetings, and the possibility of conducting Section meeting registration through the [maa.org](http://maa.org) website. This summer MAA will hold its first registration for MathFest 2005 using MAA's website instead of AMS's website.

Virginia Parks, the Section's Vice Chair, gave a report about Project ACCESS. She also passed along information about a possible Short Course. Section Secretary-Treasurer, Martha Abell, reported on the Section budget, which, due to the surprising revenue generated by the Spring 2004 meeting at Austin Peay State University, is in better shape this year. She also briefly discussed the finances associated with hosting a State Dinner and various methods for contacting section members and liaisons. In addition, she announced that Hal Nesbitt is now the person in the national office who works with the sections. Virginia Watson, the Section's Newsletter Editor, gave out a handout that contained useful information regarding the number of issues and ads placed in the Spring Newsletter over the past five years. In Spring 2004, each newsletter cost \$0.95 to photocopy. She also announced that she has a new managing editor, Karen O'Hara, from High Point University, and asked for suggestions for a special article for the Spring 2005 Newsletter. Tom Barr, who is new to his position of Program Chair, reported that he is using the basic layout of recent programs to develop this year's program. He also asked that the Executive Committee members think of possibilities for Special Sessions for the Spring Meeting for the Saturday morning discussion. In addition, he

discussed some other ideas for the meeting, including having special session organizers and presentations by representatives of industry.

Next, the group heard reports from the State Directors. Bruce Atkinson (Alabama) reported that the Alabama State Dinner will take place on February 11, 2005 at Troy University in Dothan. Curtis Herink (Georgia) reported that he is working to update the e-mail list of the MAA Liaisons in his state and is soliciting a host for the Georgia State Dinner for the spring. Rob Harger (North Carolina) told the group about the successful North Carolina State Dinner held last spring at Elon University. He will try to return to the North Carolina tradition of hosting two state dinners this year. The first will be at Catawba College and he hopes to hold a second in the spring in the western part of the state. Stephen Davis reported for John Harris (South Carolina) that the South Carolina State Dinner will be held at USC-Beaufort. Gary Hall (Tennessee) informed the group that the attendance at last spring's Tennessee State Dinner was much improved over the previous year. He has also been working to improve the accuracy of the MAA Liaison list for Tennessee.

Stephen Davis reported for the Section Committee Chairs. The Nominations Committee reported that they need a nominee for Tennessee State Director while Martha Abell and Virginia Parks have agreed to be nominated for Secretary/Treasurer and Vice-Chair, respectively. They also plan to nominate David Anderson of the University of Tennessee (Knoxville) for the post of Section Lecturer. The Teaching Award Committee Chair Ron Harshbarger reported that he asked the State Directors to contact the liaisons in their state to solicit nominees for the Section Teaching Award. Service Committee Chair, Ray Collings, asked that nominations be made for the Service Award, particularly by members of the MAA-SE Executive Committee.

The Section's Project NExT Executive Committee was represented by Charlotte Knotts-Zides and Rob Harger. They reported that they would like to conduct the Murder Mystery, led by Western Carolina University's Julie Barnes, again this year and have it advertised in the Fall Newsletter so that students may make plans to attend on March 10. They would also like to offer a special session or panel discussion for current graduate students to give advice on applying for jobs and other issues of concern for them. In addition, they are looking into the possibility of funding opportunities associated with Project ACCESS. They plan to accept a new class of participants this spring. They will send out e-mails to department chairs and new MAA members to advertise their group and solicit memberships. They hope to have 7-8 new members this year. Virginia Parks reported that there are three faculty members from the Southeastern Section to be inducted into the first national class of Project ACCESS.

Section Historian Joe Albree gave an update on the issue that he raised at the Spring 2004 Meeting of the MAA-SE Executive Committee at Austin Peay



where he hoped that the MAA could get involved in the rebuilding of the mathematics community in the Middle East. He has since spoken with the SIGMAA on Math History and they are investigating what can be done to improve the situation. He also reported on the status of initiating a Section Archive. After having discussions with representatives from the University of Texas and Georgia Tech, Joe recommended that the archives be established at Georgia Tech based on the fact that the location is within the Section and has historical ties to the Section. He was additionally impressed with the staff members at Georgia Tech and their willingness to give assistance in putting together the archives. After the motion was made and seconded, the group discussed several issues including items that should be stored in the archives, copyright laws and whether the archives could be moved at a later date if that were desired. The motion was also amended to name the Section Archives, "the John Neff Collection", in honor of the Georgia Tech faculty member and long-serving member of the Section. The motion was endorsed, and Joe Albree agreed to check on the details that were of concern to the group. He will provide details of his findings at the Spring Meeting of the Executive Committee at Meredith College.

Jeff Clark, the Section Webmaster, gave the committee an update on the Section Website ([www.maa.org/southeastern](http://www.maa.org/southeastern)). Jeff also suggested that the website be advertised through the newsletter. He will also plan to place the history of the section as well as the report on minority participation in the MAA-SE on the website.

MAA Treasurer John Kenelly gave a report on the financial status of the national organization. He pointed out that Sections may prefer to have large gifts to their section go through the national office for tax purposes. These gifts can be saved in the General MAA Investments. He also spoke of "7777", which denotes that the MAA has 7 million dollars each in the operating budget, endowments, real estate, and grants.

Dan Teague, the Governor At Large for High School Teachers, reported that he is trying to form a SIGMAA for the teaching of Advanced High School Mathematics (post-Precalculus). He is trying to encourage more high school AP Calculus Teachers to attend MAA Meetings to find more applicable professional development opportunities than are typically found at other conferences they attend. The SIGMAA will introduce them to the MAA and will have special programs for high school teachers at section and national meetings. He will also encourage two-year college and university faculty to get involved in the SIGMAA. He plans to encourage AP Calculus teachers in the area to attend the Section Meeting at Meredith College.

The Executive Committee was joined on Saturday morning by the organizers of the Spring Meeting at Meredith College, Tim Hendrix, Virginia Knight, and Paul Schuette, who came well-prepared with plans for buildings to use for the

conference, pictures of campus, ideas for the Friday evening social/dinner, and a possible idea for a fourth speaker. The Executive Committee discussed issues such as the location of exhibits, plenary sessions, short courses, contributed sessions, Math Jeopardy, and TA Rush. They also discussed the layout of the meeting, making sure to avoid conflicts and allow time for special sessions for high school teachers being organized by Dan Teague. The group also proposed that representatives of industries in the area be invited to make presentations at the conference. Several Executive Committee members proposed Short Courses that had been presented to them by faculty members in the section willing to put together short courses. The group also thought of ideas for other short courses and discussed possible speakers from the list of national MAA officers. John Harris (Furman) and Michael Berry (SIAM-SEAS, University of Tennessee-Knoxville) will organize the Math Jeopardy competition. The organizers at Meredith will recruit MAA members from nearby institutions to serve as session moderators. After a productive meeting, the Executive Committee adjourned and enjoyed lunch together.

**Martha Abell**

**1<sup>st</sup> Biennial Mercer University Undergraduate  
Research in Mathematics Conference (MUURMaC)  
April 15-16, 2005**

Mercer University announces a conference for students and faculty interested in undergraduate research. We invite submissions for fifteen-minute presentations from undergraduates engaged in the research process. Teams of 3 students each are also invited to participate in a problem solving competition. The conference will take place in conjunction with the Georgia MAA State Dinner. Plenary lectures will include:

“Calculating the Secrets of Life: Mathematics in Biology and Medicine”  
and  
“DNA Topology”

Dr. De Witt Sumners  
Robert O. Lawton Professor of Mathematics  
Florida State University

Partial funding will be available for presenters.

For more information see <http://www.mercer.edu/math/muurmac>

or contact Dr. C.A.Yackel at [yackel\\_ca@mercer.edu](mailto:yackel_ca@mercer.edu)

This conference partially funded by MAA NSF-RUMC grant DMS-0241090

## Call For Nominations for the 2005 Southeastern Section Distinguished Service Award

The Southeastern Section presents a Section Distinguished Service Award at the annual spring meeting each year. A member of the Section who has made outstanding contributions at the Section level will be so honored at the March 2005 meeting at Meredith College.

The Section Distinguished Service Award Committee encourages every member of the Section to submit a nomination to the committee chair for the 2005 award. Please send your nomination including a statement supporting the nomination to Ray Collings, via surface or email. [Ray Collings, Math/Comp. Sci./Engineering Dept., Georgia Perimeter College, 555 N. Indian Creek Dr., Clarkston, GA 30021 or e-mail: [rcollings@gpc.edu](mailto:rcollings@gpc.edu)]

Nominations for the 2004 award may be carried forward for consideration for the 2005 award, if the nominator so desires. If so, a letter which updates the previous nomination is requested from the nominator.

**DEADLINE FOR SUBMISSION: January 31, 2005**

### Previous Service Award Recipients

The Section Distinguished Service Award has been awarded in even-numbered years, beginning in 1990, then annually, since 1997.

April 1990	Trevor Evans, Emory University
April 1992	Bill F. Bryant, Vanderbilt University
April 1994	James G. Ware, University of Tenn. at Chattanooga
April 1996	Marcellus Waddill, Wake Forest University
March 1997	John Kenelly, Clemson University
March 1998	David Stone, Georgia Southern University
March 1999	M. F. Neff, Emory University
March 2000	Tina Straley, MAA Executive Director
March 2001	Charles Cleaver, The Citadel
March 2002	Sharon Cutler Ross, Georgia Perimeter College
March 2003	Sylvia Trimble Bozeman, Spelman College
March 2004	Theresa E. Early, Appalachian State University

## Announcements

### Contribute to MAA-SE Student Activities

The Southeastern Section supports student activities at its annual meeting through:

- TA Rush and a student pizza lunch
- Undergraduate Student Poster Sessions
- Undergraduate Student Contributed Paper Sessions
- Reduced student registration fees

Further, student participation in the Association is encouraged by the State Directors through their organization of state dinners and coordination with MAA Student Chapters.

The Executive Committee of the Southeastern Section invites you to help sponsor these activities through a donation of \$10 or more. Make your contribution by sending a check (payable to MAA-SE) to

Martha L. Abell, Secretary/Treasurer, MAA-SE  
Department of Mathematics  
Georgia Southern University  
Statesboro, Georgia 30460

### Alabama State Dinner

The Alabama State dinner will be held February 11, 2005 at Troy University, Dothan Campus. The speaker will be Doug Hardin, Vanderbilt University

### Georgia State Dinner

The Georgia MAA State Dinner will be held at Mercer University on April 15, 2005. Dr. De Witt Sumners, Robert O. Lawton Distinguished Professor of Mathematics at Florida State University, will speak on "Calculating the Secrets of Life: Mathematics in Biology and Medicine." More information will soon be available at [www.mercer.edu/math/](http://www.mercer.edu/math/).

### South Carolina State Dinner

The South Carolina State Dinner will be held on Friday, February 25th on the campus of USC-Beaufort. The speaker will be Jack Brown of Auburn University. Stay tuned for details!

### Tennessee State Dinner

The Tennessee State Dinner date is to be announced. People should check with their liaison in January for information about the dinner.

### New look for MAA Southeastern Website

Check out the new look of the MAA Southeastern Section Website at the address <http://www.maa.org/southeastern>.

**1st Biennial Mercer University Undergraduate Research in Mathematics Conference (MUURMaC) April 15-16, 2005**

Mercer University announces a conference for students and faculty interested in undergraduate research. We invite submissions for fifteen-minute presentations from undergraduates engaged in the research process. Teams of 3 students each are also invited to participate in a problem solving competition. The conference will take place in conjunction with the Georgia MAA State Dinner. Plenary lectures by Dr. De Witt Sumners the Robert O. Lawton Professor of Mathematics at Florida State University will include:

- “Calculating the Secrets of Life: Mathematics in Biology and Medicine”
- “DNA Topology”

Partial funding will be available for presenters.

For more information see <http://www.mercer.edu/math/muurmac> or contact Dr. C.A.Yackel at [yackel\\_ca@mercer.edu](mailto:yackel_ca@mercer.edu)

This conference partially funded by MAA NSF-RUMC grant DMS-0241090.

**SIAM-SEAS Regional Conference**

The SIAM-SEAS regional conference is in beautiful Charleston, SC, on March 25th and 26th. Events on March 25th will be held at The Citadel and on March 26th at the College of Charleston. The conference will feature a Math Jeopardy Contest, hosted by Mike Berry of the University of Tennessee at Knoxville. More information can be found on the website <http://math.cofc.edu/SIAMSEAS/>. We look forward to a great conference and invite everyone to attend!

**Math Murder Mystery Event  
at SE Section MAA meeting  
for****Students, Math Club Advisors, and Project NExT fellows**

On Thursday, March 10, Dr. D. Ed Body will be found dead shortly after arriving at the MAA conference. Murder mystery participants will gather at 7:30pm that night to begin investigations. It is their job to use mathematics to solve the crime while trying to prove their own innocence. This is a noncompetitive, interactive event that will allow participants to have fun, use their math skills, and meet people from other schools at the same time.

If your student group is interested in participating, or if you have any questions, please contact Julie Barnes at [jbarnes@email.wcu.edu](mailto:jbarnes@email.wcu.edu) or (828) 227-3943. Each school will be asked to provide a list of people coming (to be included on the suspect list), and to bring a snack to share with everyone. Participants may also want to bring graphing calculators.

# CLEMSON

U N I V E R S I T Y

## Department of Mathematical Sciences

**The Graduate Program** The Department offers the M.S. and Ph.D. degrees in mathematical sciences. The *master's degree* is based on developing breadth as well as depth in the mathematical sciences; it requires two years of course work and culminates with a master's project, directed by an individual faculty member. The *Ph.D. degree* generally requires at least three years of study beyond the master's degree. The Department also offers, with the Department of Management, a Ph.D. in *management science*.

**Research Areas** Algebra and Discrete Mathematics, Applied Analysis, Computational Mathematics, Financial Mathematics, Operations Research, and Probability and Statistics.

**Admission Requirements** Admission decisions are based upon GRE General scores, transcripts, and letters of recommendation.

**Financial Support** The department offers a number of graduate teaching assistantships which carry a stipend of \$14,000 for 10.5 months. Research assistantships are also offered, with stipends in the range \$14,000–\$20,000. Substantial tuition reduction is available for both graduate teaching and graduate research assistants. Highly qualified applicants may qualify for university fellowships, which carry an additional \$5000 stipend and no additional duties.

**Additional Information** Visit our graduate web page using the address <http://www.math.clemson.edu/graduate/> or contact us by email at [mathsci@clemson.edu](mailto:mathsci@clemson.edu). You can also write to us: Graduate Coordinator, Department of Mathematical Sciences, O-102 Martin Hall, Clemson University, Box 340975, Clemson, SC 29634-0975.

## News From the Campuses

### **Agnes Scott College** (Decatur, GA)

Professor Robert Leslie is spending his fall semester sabbatical as a Fulbright Teaching Fellow in Nicaragua. He is teaching mathematics at The Polytechnic University of Nicaragua in Managua, Nicaragua, where he has developed a seminar for Nicaraguan university mathematics teachers on Modern Methods of Teaching Mathematics using technology. After the spring semester, Bob will retire from Agnes Scott in May 2005 after 35 years of dedicated teaching and service. Professors Myrtle Lewin and Alan Koch served as Readers in June at the annual Advanced Placement Calculus Reading at Colorado State University in Fort Collins, Colorado. (Submitted by Larry Riddle)

### **Armstrong Atlantic State University** (Savannah, GA)

Armstrong is welcoming five new faculty members this year: Mary-Anne Barbieri, Tim Ellis, Lorrie Hoffman, Greg Knofczynski, and Jamie Newman. Dr. Hoffman is our new department head. She comes to us from the University of Central Florida. Dr. Knofczynski is a brand new Ph.D. in statistics from the University of Northern Colorado. Dick Munson retired this fall after over thirty years. Sabrina Hessinger is now a regional Co-PI of the Partnership for Reform in Science and Mathematics (PRISM). PRISM is an NSF funded initiative to improve performance in Science and Math by strengthening ties between P-12 schools and college campuses. Several Math faculty are serving as Associates in this enterprise. This fall Selwyn Hollis delivered the Annual Sherwood Ebey Lecture at Sewanee. Jim Brawner and Ed Wheeler (former department head and current Dean of the College of Liberal Arts and Sciences) published *Discrete Mathematics for Teachers* this year. On February 19 the department will host our twenty-seventh annual High School Mathematics Tournament. (Submitted by Tim McMillan)

### **Auburn University** (Auburn, AL)

The process of "recombination" of the mathematical sciences at Auburn is now complete. In the spring of 2004, the faculty of the Departments of Mathematics and Discrete and Statistical Sciences jointly carried out a nationwide search for a Chair of the combined department. Dr. Michel Smith, who was then Chair of the Department of Mathematics at Auburn, was selected. The faculty voted to name the combined department the Department of Mathematics and Statistics. Among the members of the new department are the statisticians who were in the DSSC Dept. Those faculty include Ash Abebe, who came to Auburn from the University of Southern Illinois in 2002, Nedret Billoer, who came to Auburn from the University of Iowa in 2003, and Mark Carpenter who came to Auburn from the University of Alabama in Birmingham in 2003. Mark Carpenter has been named Statistics Program Director.

The TEAM-MATH Project, funded by the \$9 million NSF Grant is now underway. About 340 mathematics teachers attended the 10 day work-



**Master of Arts Programs in the  
Department of  
Mathematical Sciences**

**The *Master of Arts in Mathematics*** is designed for students who are interested in pursuing a teaching career at the college level. The course of study follows the American Mathematical Association of Two Year Colleges (AMATYC) guidelines and provides an excellent mix of graduate level mathematics content with attention to pedagogy. Courses are offered during the regular academic year at the main campus in Boone. Students completing this program will have a solid foundation in mathematics as well as knowledge of teaching in the collegiate classroom. Graduates have become instructors at two- and four-year colleges or have continued their graduate education in Ph.D. programs to prepare for teaching at the university level. For admission, students must meet the requirements of the graduate school and be prepared to take courses at the master's level.

**The *Master of Arts in Mathematics Education*** is designed for practicing teachers who are interested in furthering their secondary school teaching careers. The course of study follows the State of North Carolina guidelines for M licensure in mathematics and provides an excellent mix of graduate level mathematics with a focus on issues in secondary school teaching. Courses are offered in Boone during the summer and in the evenings at regional locations during the fall and spring. Students completing this program will have a solid foundation in mathematics as well as knowledge of pedagogical issues. Graduates have continued their teaching careers, assuming leadership positions in their schools, regions, and disciplines. For admission to this program, students must meet the requirements of the graduate school and must have A licensure in mathematics.

**Financial Aid:** Assistantships for full time on-campus students are available for the 2005/2006 academic year. Awards range from \$8000 to \$12000 per academic year. A limited number of tuition waivers are available for out-of-state students who apply before February 1. Other scholarships and fellowships, including minority student grants, are available through the graduate school on a competitive basis.

**Contact Information:** Holly Hirst, Graduate Coordinator  
Department of Mathematical Sciences  
Appalachian State University  
Boone, NC 28608  
HirstHP@appstate.edu  
(828) 262-3050



shop this past summer. Two additional 2-day workshops were offered for teachers not able to attend the first workshop. Over the 5 years of the project, mathematics teachers at each school in SE Alabama are expected to attend these workshops. Steve Stuckwisch (co-PI), Chris Rodger (co-PI), Phil Zenor, Overtoun Jenda and Michel Smith are the Math/Stat faculty involved in the project. In addition, Chris Rodger was awarded a No Child Left Behind grant to hold two 5-day workshops: "Critical Thinking and Problem Solving - A Second Summer Discrete Math Leadership Institute for K-8th Grade Teachers" for the 2004-2005 school year.

During spring semester, actuaries from a number of companies visited the department making presentations and conducting job interviews with students involved in the new Actuarial Science Program. Six students got summer actuarial internships at ALFA Insurance in Montgomery, AFLAC Insurance in Columbus, GA, Protective Life in Birmingham, and Vesta Insurance Group in Birmingham. The two students who graduated with majors in actuarial science last year took permanent positions in the Actuarial Department at Protective Life. Incidentally, one of the graduating students, Rachel Pickett, was Miss Auburn University, Captain of the AU Band Majorettes, competed in the Miss Alabama Pageant twice, and was elected to Phi Beta Kappa last spring.

The first Ben Fitzpatrick Graduate Fellowship in Topology was awarded to Brad Bailey this September. Ben's nephew, "Little" Ben, who is now the Clarence J. Wallen Professor of Mathematics at Loyola Marymount University, traveled to Auburn and gave a departmental colloquium talk before the award ceremony. The AU chapter of Phi Beta Kappa which inducts one (and only one) junior student to membership each year chose Scott Varagona, a junior mathematics/philosophy double-major.

Several new appointments to Editorial Boards have occurred. Narendra Govil was appointed as one of the editors of the Journal of Inequalities in Pure and Applied Mathematics and the Australian Journal of Mathematical Analysis and Applications. Pete Johnson was appointed to the editorial boards of the Global Journal of Mathematical Sciences and the International Journal of Pure and Applied Mathematical Sciences. Chris Rodger and Dean Hoffman were Guest Editors for a volume of the journal, Discrete Mathematics, that was issued in honor of Curt Lindner on the occasion of his 65th birthday.

A number of faculty have given invited lectures at important conferences in the past year. Yongsheng Han spoke at the International Conference on Singular Integrals, held in Yamagata, Japan, in November. Paul Schmidt spoke at the AIMS Fifth International Conference on Dynamical Systems and Differential Equations (Pomona, CA, June 2004) and the Fourth World Congress of Nonlinear Analysts (Orlando, FL, July 2004). Chris Rodger gave the key-note lecture at The International Symposium on Graphs, Designs and Applications, held at Messina, Italy, and spoke at the Twelfth Biannual Italian Conference in Combinatorics, held in Acireale, Italy. Krystyna Kuperberg spoke at the Nipissing University Topology Conference in May. During the past year, Curt Lindner spoke at LOOPS 03, held at the Czech University of



## Fellowships and Assistantships plus Tuition

The Department of Mathematics at the University of Louisiana at Lafayette offers graduate programs with concentrations in applied mathematics, pure mathematics, and statistics. It has Fellowships and Assistantships for students seeking a Ph.D. degree. Stipends are \$17,000 per fiscal year for a Board of Regents Fellowship and up to \$12,000 per academic year for an Assistantship. All fellows and assistants receive a waiver of tuition and fees, which could bring the level of funding to as much as \$26,000 per academic year. Additional summer support is generally available for teaching assistants. Fellows have priority for low-cost university housing. Applications for fellowships must be completed by February 15, 2005. Although there is no deadline for Assistantships, preference will be given to applications received by March 15. High GRE scores (verbal, quantitative, and analytical) and outstanding academic achievement are required. Please contact:

Dr. Nabendu Pal, Graduate Coordinator  
 Department of Mathematics  
 University of Louisiana at Lafayette  
 Lafayette, Louisiana 70508

Telephone: (337) 482-5279  
 E-mail: [math@louisiana.edu](mailto:math@louisiana.edu)  
 Fax: (337) 482-5346  
 Web Page: <http://www.louisiana.edu/math>

Agriculture, the International Symposium on Graphs, Designs, and Applications 2003, held at the Università degli Studi di Messina (Sicily), and at the 18th Clemson Mini-Conference on Combinatorial Optimization. He also gave the Pi Mu Epsilon Lecture at Western Michigan University in April. Pete Johnson spoke at the 19th Clemson Mini-Conference on Discrete Mathematics and Related Fields this past October.

J. P. Holmes spent the summer in La Jolla, CA, working at the Center for Communications Research of the Institute for Defense Analyses. Wenxian-Shen received an NSF grant of \$10,600 for a "U.S.-Polish Cooperative Research Project" for the period 6/1/04 to 5/31/06. She will work in collaboration with Dr. Janusz Mierczynski of Wroclaw University of Technology. Gary Gruenhagen received an NSF research grant for \$141,556 for the period 6/1/04 to 5/31/07. Krystyna Kuperberg was elected to the executive committee of AWM and she teamed up with former Auburn Ph.D. students, Alex Clark and Judy Kennedy, in organizing the "International Workshop on Geometric Methods in Dynamical Systems", held in Newark, Delaware, in June 2004. During this past summer, Curt Lindner was a Visiting Professor at the Slovak University of Technology and the University of Queensland in Brisbane, Australia. He also served on the Scientific Committee for COMBINATORICS 04, the 12th Italian Conference in Combinatorics. In September, Overtoun Jenda and Pat Goerters hosted an Abelian Groups, Rings and Modules Conference at Auburn in Honor of Edgar E. Enochs for his Contributions to Algebra and in Honor of his 72nd Birthday. Jo Heath, who has been Acting Associate Dean of the Graduate School for several years, returned full-time to the Mathematics Department Spring 2004. Professors de Souza, Govil, Hetzer, and Schmidt were invited to present their research at various universities in Spain this past summer and spent part the summer doing that (with support from those universities).

The Department hired one faculty member, Dr. Huajun Huang, who finished his Ph.D. at Yale University. His areas of specialization are Representation Theory, Invariant Theory for Lie Groups, and Algebraic Geometry. The Department is currently recruiting for two new faculty in Statistics.

Four students finished their Ph.D.s during the year. Brian Muse received his Ph.D. under Kevin Phelp's direction and is now an Assistant Professor at Columbus (GA) State University. Sasha Logan received her Ph.D. under Chris Rodger's direction and is now an Assistant Professor at Coastal Carolina University. Sasha won the College of Sciences and Mathematics Outstanding Graduate Student award, as well as the Joint MAA (Southeastern Sectional)/SIAM (SE Atlantic Sectional) Graduate Student Presentation - First Place, 2003 award. John Holliday finished his Ph.D. under the direction of Pete Johnson and is now an Assistant Professor at the University of Tennessee at Martin. Last Spring he received the COSAM outstanding GTA Teaching Award for 2004. Michael Granado received his Ph.D. under Gary Gruenhagen's direction this August and is currently a Visiting Assistant Professor at Auburn. (Submitted by Jack Brown)

**UNIVERSITY  
OF  
SOUTH ALABAMA**



**MATHEMATICS  
AND  
STATISTICS**

**GRADUATE STUDIES IN MATHEMATICS**

The Department of Mathematics and Statistics offers a modern and flexible program of study leading to a Master of Science degree in Mathematics. The course of study can be tailored to meet the needs of individual students. The program combines a basic graduate education in mathematics with options for concentrated study in various areas of the mathematical sciences including computer science and statistics. Depending upon the electives selected, the curriculum can be used as a preparation for a more advanced degree in the mathematical sciences, or a preparation for employment in industry, government, or education.

The Department enjoys a growing reputation of excellence in research and is committed to quality instruction. Graduate students have an opportunity to work closely with individual faculty members and to participate in departmental colloquia and research seminars.

Research and teaching assistantships are available on a competitive basis. In addition to a stipend of \$10,000 they carry a tuition waiver.

For more complete information, including application forms, please write, call, or visit our website:

Graduate Coordinator  
Department of Mathematics & Statistics  
University of South Alabama  
Mobile, AL 36688-0002  
(251) 460-6264

email: [pillen@jaguar1.usouthal.edu](mailto:pillen@jaguar1.usouthal.edu)  
<http://www.usouthalabama.edu/mathstat/>

**Auburn University at Montgomery** (Montgomery, AL)

Dr. Dan Marks, Associate Professor, retired after a 25 year career at AUM. Following Dr. Jim Kays's resignation, Dr. Marks served as acting department head. Dr. Bill Nowell has nominally retired, but continues to teach occasional upper-level courses in computer science. The new Dean of the School of Science is Professor Bayo Lawal. He comes to us from St. Cloud State University. Since his field is statistics, he is a faculty member in our department. Our new department head is Tuval Foguel. His Ph.D. is from Univ. of Illinois at Urbana-Champaign. Previously Dr. Foguel was at NDSU - Fargo where he was director of graduate studies. Dr. Scott Brown, Assistant Professor, joined us after finishing a doctorate in math education at Auburn main campus. Dr. Brown's research interests are math education, Euclidean geometry, Fibonacci numbers, and the history of mathematics. Dr. Luis Cueva-Parra, Assistant Professor, and Dr. Paul R. Davis, Instructor, both joined our faculty this fall. Dr. Cueva-Parra completed his Ph.D. in 2003 at the University of Southern Mississippi. His research interests include numerical analysis, high performance scientific computing (he plans to make use of Alabama's super-computer), computational physics and mechanics, and heat transfer and combustion. Dr. Davis's Ph.D. is from Illinois-Urbana/Champaign, in 1977. He joins us after an industrial career in space communications.

AUM now has an active math club that sponsors regular talks for undergraduates. Last March Dr. Joan Powell and her team of volunteers organized Sonia Kovalevsky Day, to encourage high school aged women to consider a career in mathematics. This event was jointly funded by AUM and AWM and will occur again this year with funding from the same sources.

Dr. Foguel has arranged for the next Zassenhaus Group Theory Conference to be at AUM, March 18-20, 2005. These conferences were first organized by Hans Zassenhaus in the 1960's. In even numbered years they are at Ohio State or Denison University but in odd numbered years they are usually elsewhere. The algebraist Lindsay Childs, SUNY Albany, recently visited to work with Dr. Robert Underwood, and the number theorist Florian Luca, Instituto de Matematicas, Morelia Mexico, came to work with Dr. Pante Stanica. Both visitors gave colloquium talks in our MAMS (Montgomery Area Mathematics Seminar) series. (Submitted by Rhodes Peele)

**Austin Peay State University** (Clarksville, TN)

Kirk Menser was promoted to professor. Samuel Jator was granted tenure. Leon McQueen retired this year after 32 years of service and 18 years as chair of our department. We are fortunate that he will remain in a post-retirement capacity. We welcome Larry Hoehn as our new chair.

We welcome four new faculty members. Jackie Vogel, a Doctorate in Mathematics Education from University of Tennessee, accepted a tenure track position in Mathematics Education. Loretta Griffy, Doctorate in Educational Administration from Tennessee State University, accepted a tenured position at our Fort Campbell campus. Melissa Hunter, M.A. in Statistics from Virginia Polytechnic Institute and State University, and Linh Tran Changaris, M.S. in



## The University of Georgia

### **Mathematics Department**

**Research** – The University of Georgia Mathematics Department offers Doctoral and Master's degrees in pure and applied mathematics. There are fifty research faculty, including ten postdocs. The department has strength in algebra, analysis, applied math, geometry, number theory, and topology.

**Graduate Assistantships** – The department holds a National Science Foundation VIGRE grant to support the integration of undergraduate and graduate education with faculty research. VIGRE fellowships are available for US citizens and permanent residents and provide support for at least one year of the five-year PhD program. The VIGRE stipend is \$21,000, including summer. Most other students admitted into the graduate program receive teaching assistantships; for the 2004–2005 academic year, these assistantships will pay \$12,742 – \$13,576. Additional summer support is also available. Students with teaching assistantships or VIGRE fellowships pay only \$25 per semester in tuition.

**Attractions** – Athens is a vibrant college town with a thriving downtown area and rich culture, which includes a world famous music scene. It is located sixty-five miles east of Atlanta and fifty miles south of the Appalachians.

**Contact Information** – Please visit [www.math.uga.edu](http://www.math.uga.edu) for additional information, or write to:

**Professor Robert Varley, Graduate Coordinator, Department of Mathematics**  
**University of Georgia, Athens, GA 30602 (706-542-2211, [rvarley@math.uga.edu](mailto:rvarley@math.uga.edu))**

Mathematics from Western Kentucky, were hired for a one year appointment.

Benessa Defend (Computer Science major, Mathematics minor) was selected last summer to participate in the Distributed Mentor Project, sponsored by Computing Research Association Committee on the Status of Women in Computing Research. Several students gave talks last year. Amber DeMore and Kyle Covington gave talks at the Southeastern Section Meeting of the MAA. Amber DeMore also gave a talk at Western Kentucky University's 23th Annual Mathematics Symposium

APSU was a host site for the Middle Tennessee Region of the 48th Tennessee Mathematics Teachers Association Annual Mathematics Contest for high school students in April. We will once again be a host site for this contest next April. We also host the annual APSU middle school mathematics contest in April of each year. (Submitted by Jim Vandergriff)

### **Belmont University** (Nashville, TN)

The department continues its Mathematical Musings and Munchings presentation series during 2004-05. Topics during Fall 2004 have included Math Meets Music and Voting Methods. A group of faculty and students attended the SE MAA meeting at Austin Peay University, Spring 2004. Two of the students presented posters, one student gave a talk and one faculty member gave a talk. Jennifer Rowe (a 2002 graduate of Belmont) joined the Belmont faculty as Mathematics Instructor. She completed her MS program at the University of Kentucky in May 2004. Shannon Mathis left her position as Mathematics Instructor to pursue a Ph.D. in Mathematics at the University of Tennessee in Knoxville beginning in Fall 2004. Mike Pinter was presented with one of the inaugural Tower Awards for Exceptional Contribution to Campus Life by Belmont's Office of Student Affairs during Spring 2004. Stephen Campbell was granted a sabbatical for the Spring 2004 semester. Mary Goodloe completed her Ph.D. work at the University of Kentucky in February 2004. Otis McCowan retired from Belmont after serving for 37 years.

The department chair position was in transition during the early part of 2004. Stephen Campbell had served as Chair since 1997. When he went on sabbatical in January 2004, Joyce Blair Crowell became interim chair for two months until Mary Goodloe completed her dissertation defense. As of March 2004, Mary Goodloe became chair of the department.

The Belmont MAA and ACM Student Chapters are combining their efforts during 2004; they are calling the combined group the MAACM. Andy Miller (MAA) and Bill Hooper (ACM) serve as faculty advisors for the group. In conjunction with the MAACM group, the department hosted a lunch and information session for all department majors and minors. Keeley Hutchison and Jennifer Rowe worked to organize the event. Several Mathematics faculty members participated in MAA sponsored workshops: PREP Assessment Workshop in March 2004, to be continued until January 2006 (Mary Goodloe, Barbara Ward and Mike Pinter); PREP Chairs Workshop in June 2004 (Mary Goodloe); PMET Workshop in August 2004 (Kay Geving); PREP Quantitative Literacy Workshop in August 2004 (Mike Pinter and Barbara Ward, along with

two non-mathematics faculty members). In addition, Andy Miller participated in Project NeXT.

The following students received departmental awards in Spring 2004: Michael Hull (Senior Mathematics Award); Adam Mark and Justin Jordan (Senior Computer Science Award); Jacob Eichenberger (Beginning Mathematics and Computer Science Award); and Justin Jordan (Problem Solving Competition Award). (Submitted by Mike Pinter)

#### **Brevard College** (Brevard, NC)

Brevard College has begun a teacher certification program which, with the B.A. in mathematics, allows us to train and certify high school mathematics teachers. Clarke Wellborn presented a colloquium at the College of Charleston. Mark Ginn of Appalachian State and Radulian Pop, a recent graduate of Brevard College, gave presentations in our colloquium series. We will graduate three more majors this year, making ten since our program began. Susan Horn retired this year after 27 years. (Submitted by Clarke Wellborn)

#### **Carson Newman College** (Jefferson City, TN)

Dr. Henry Suters successfully defended his thesis in completion of a master's degree in computer science from the University of Tennessee. Dr. Alden Starnes was awarded tenure. Dr. Kim Buckner received his Ph.D. in computer science from the University of Tennessee. Former department chair and professor emeritus, Dr. Sherman Vanaman, continues to teach for us full-time to fill our vacancy. (Submitted by Thomas Bass)

#### **The Citadel** (Charleston, SC)

Mei Chen is on sabbatical this fall semester, visiting the Department of Mathematics at the University of Connecticut at Storrs. She will visit the Department of Electrical and Computer Engineering at Utah State in the spring semester. Charles Cleaver is on sabbatical and plans to retire in December. We have a new tenure-track assistant professor in the department. She is Li Zhang, who received her Ph.D. in Applied Mathematics and Computational Science from the University of Iowa. (Submitted by Dave Trautman)

#### **Clemson University** (Clemson, SC)

For the Fall of 2004, we welcome two new faculty members and welcome back two faculty members from two-year leaves of absence. Dr. Joan Hoffacker was hired as an assistant professor. Jo received bachelors degrees in mathematics and computer science from Indiana University in 1995 and her Ph.D. in mathematics from the University of Nebraska-Lincoln in 2001. She was a postdoctoral associate and a VIGRE postdoctoral associate at the University of Georgia from 2001 until the summer of 2004. Her main research interest is differential equations on time scales. Dr. Robert Lund joins us as a full professor from the University of Georgia, where he was an associate professor and the associate head of the Statistics Department. Robert received his bachelors and masters degrees from Auburn University in 1986 and 1988, re-





**Mathematical Association of America  
Southeastern Section  
84<sup>th</sup> Annual Meeting  
Meredith College  
Raleigh, North Carolina  
Friday – Saturday, 11 – 12 March 2005**

**MEREDITH**  
COLLEGE

**Meeting Announcement:** The eighty-fourth annual meeting of the Southeastern Section of the Mathematical Association of America will be held on Friday and Saturday, 11 – 12 March, 2005. The Association invites all interested persons to participate and asks that department chairpersons, faculty, and members of the Section help in publicizing the meeting. We especially encourage high school teachers and faculty in two-year colleges to attend. Both pre-registration and on-site registration will be available for all MAA members. Registered individuals are entitled to attend all talks Friday and Saturday with the exception of Friday morning short courses for which there is a separate pre-registration.

**General Sessions:** There will be four general session speakers on Friday and Saturday:

- Frank Farris, Santa Clara University and Editor of *Mathematics Magazine*
- Robert Fray, Furman University and Section Lecturer
- Doris Schattschneider, professor emerita of Moravian College
- Jeff Knisley, East Tennessee State University and Section Teaching Award recipient

**Call For Contributed Papers:** The Program Chairperson invites submission of titles and abstracts for fifteen-minute (20 minutes between the start of one talk to the start of the next) contributed talks in all areas of mathematics by college and university faculty, graduate students, and undergraduates from across the section. **Titles and abstracts** should be sent to the program chairperson (Tom Barr, [tombarr@rhodes.edu](mailto:tombarr@rhodes.edu), Mathematics and Computer Science Department, Rhodes College, 2000 N. Parkway, Memphis, TN 38112) before **Friday, 11 February, 2005** in order for the abstract and title to appear in the printed program of the meeting. It will be very helpful if individuals send this information in advance of this deadline. Talks will be organized into concurrent sessions, to the extent possible, by the general mathematical area of the abstract. There will also be organizers of sessions for selected mathematical areas:

- Statistics (Jackie Dietz, [dietzjac@meredith.edu](mailto:dietzjac@meredith.edu))
- Calculus (Ben Klein, [beklein@davidson.edu](mailto:beklein@davidson.edu))
- Mathematical Modeling (Charlotte Knott-Zides, [knottszideca@wofford.edu](mailto:knottszideca@wofford.edu))
- Mathematics Education (Tim Hendrix, [hendrixt@meredith.edu](mailto:hendrixt@meredith.edu))

Special sessions devoted to Industrial Mathematics and the Moore Method of teaching mathematics are anticipated as well.

**Undergraduate Poster Session:** Students may present research and results of special projects undertaken during summers or the academic year. The session lasts two hours on Saturday. Please send abstracts or questions to Tim Chartier ([tichartier@davidson.edu](mailto:tichartier@davidson.edu), Mathematics Department, Davidson College, Davidson, North Carolina 28035) by **Friday, 11 February 2005** to ensure that an easel will be available for your poster.

**Short Courses:** Four short courses will be offered Friday morning from 8:30-11:30.

- *Web Search and Information Retrieval*, Carl Meyer (North Carolina State University) and Amy Langville (College of Charleston)
- *Geometry and the Calculus of Variations*, Robert Bryant (Duke University)
- *Some Deterministic Models in Mathematical Biology*, James Selgrade (North Carolina State University), Cammey Cole (Meredith College) and Huseyin Kocak (University of Miami)
- *Writing to Learn Mathematics—no Grading Required*, Mary Kay Abbey and Bette Daudu (Montgomery College)

A fuller description of the short courses and instructions for pre-registering are included separately in this newsletter.

**Math Jeopardy Contest:** Teams of three or four undergraduates will compete in a mathematical version of the well-known answer-question game. Competition is limited to the first twelve schools that register. Each team should contribute several answers for which correct questions can be posed, the general categories being in undergraduate mathematics and computer science: algebra, geometry, calculus, differential equations, linear algebra, programming, etc. To register, contact John Harris ([john.harris@furman.edu](mailto:john.harris@furman.edu)) or Michael Mossinghoff ([mimossinghoff@davidson.edu](mailto:mimossinghoff@davidson.edu)).

**Project NExT-SE:** Project NExT-SE (New Experiences in Teaching) is the Southeastern MAA Section's instantiation of the national program for new and recent Ph.D.'s interested in improving the learning and teaching of undergraduate mathematics. Activities on Thursday afternoon are planned as well as sessions on Friday morning. Contact Julie Barnes ([jbarnes@weu.edu](mailto:jbarnes@weu.edu)) or Rob

Harger ([rharger@highpoint.edu](mailto:rharger@highpoint.edu)) and visit <http://math.highpoint.edu/NExT-SE>.

**T. A. Rush and Career Fair:** Students can meet with representatives of graduate programs at T.A. Rush. Contact Paul Schuette ([schuette@meredith.edu](mailto:schuette@meredith.edu)) to register your graduate program (\$25 fee payable to Meredith College). The Career Fair will have representatives of companies that operate or are headquartered in the Research Triangle.

**Chairpersons' Meeting and Liaisons' Luncheon:** On Friday during the contributed talks there will be a meeting for department chairpersons. Stephen Davis ([stdavis@davidson.edu](mailto:stdavis@davidson.edu)) will convene this group, and suggestions for topics of discussion should be sent to him. MAA liaisons will meet over lunch on Saturday, and boxed lunches will be provided for those contacting the convener Ben Klein ([beklein@davidson.edu](mailto:beklein@davidson.edu)) in advance of the meeting.

**Workshop on Advanced High School Mathematics:** Dan Teague ([teague@ncssm.edu](mailto:teague@ncssm.edu)) of the North Carolina School of Science and Mathematics is organizing a workshop for all who are interested in advanced high school mathematics. The workshop will be in three afternoon sessions (one for calculus, one for statistics, and one for math teams) on Saturday from 2:30 to 5:00. Contact Dan with expressions of interest and for further details.

**Social Event: Friday Evening, 6 – 9 PM—Your chance to explore the world!** Our Friday evening social event will be held at Exploris World Museum in downtown Raleigh. (<http://www.exploris.org/>). Attendees to the social will have the opportunity to explore the touring exhibit in the museum, which will be *Latin Jazz!*. There will be a reception of light hors d'oeuvres and a cash bar followed by a buffet of Eastern North Carolina Bar-B-Q with all the fixin's. Some vegetarian items are included on the buffet. Our evening will end with a *3-D IMAX movie—Space Station*—included in the banquet ticket.

Note: Refreshments will be available during breaks throughout the meeting.

**(Pre-) Registration:** Pre-registration for the meeting is encouraged; on-site registration will also be available. To pre-register for the meeting, complete the form found on the meeting website <http://www.meredith.edu/math/se-maa05/>.

<b>Pre-registration Fees</b>	<b>Before 20 February</b>	<b>After 20 February</b>
Faculty meeting registration	\$25	\$30
College/university students, emeritus faculty	\$10	\$15
High school teachers	\$15	\$20
High school students	free	free
Social Event	\$20	\$20
Boxed Lunch for Saturday	\$ 9	\$ 9

(Boxed lunch will be from Bear Rock Café and must be reserved in advance.)

**Hotel Information:** Participants should make their own arrangements directly with a hotel of their choice. Blocks of rooms have been reserved (until February 24) at the two properties listed below for the nights specified. Please reference the group name MAA Math Conference when making a reservation. Accommodations have varying cancellation or early checkout policies—be sure to check details when making your reservation.

**Hotels with Blocked Rooms for the Conference:**

**The Holiday Inn Brownstone Hotel** (50 rooms blocked Thursday night, 100 rooms blocked Friday night, \$69/night, additional charge for breakfast buffet, 1.5 mi from Meredith College, 919-828-0811) <http://www.ichotelsgroup.com/h/d/HOLI/hd/RDUHS>  
**Ramada Inn Blue Ridge** (90 rooms blocked Friday night, possibility of blocked rate rooms on Thursday night, \$75/night including free continental breakfast, 1.5 mi from Meredith College, 919-832-4100) <http://blueridge.pmcproperties.com/>

There are numerous other hotels within 3-8 miles of Meredith College. **Hotels near the Raleigh-Durham International Airport:** These include Fairfield Inn (919-361-2656), Hampton Inn (919-462-1620), Holiday Inn Express (919-653-2260), La Quinta (919-461-1771), Courtyard by Marriott (919-467-9444). **Hotels near Crabtree Valley Mall:** These include Marriott (919-781-7000), Residence Inn (919-279-3000), Crabtree Summit Hotel (919-782-6868), La Quinta (919-785-0071), Fairfield Inn (919-881-9800). Many other hotels and accommodations can be found at: [http://triangle.citysearch.com/section/hotels\\_visitors/](http://triangle.citysearch.com/section/hotels_visitors/)

**Transportation and Directions:** Meredith College is easily accessible from all directions via the I-440 Beltline around Raleigh. For more detailed directions and hotel directions, see the conference website: <http://www.meredith.edu/math/se-maa05/>.

**Updates:**

Updates to this announcement and ultimately a tentative schedule of talks will appear on the section web page, <http://frodo.elon.edu/maase/> and at the conference website: <http://www.meredith.edu/math/se-maa05/>.

**Short Courses**  
**MAA Southeastern Section**  
**84<sup>th</sup> Meeting**  
**Meredith College**

There are four short courses, and these run from 8:30 to 11:30 on Friday. Pre-registration for these courses should be made through Martha Abell by Friday, 11 February 2005. An insufficient number of pre-registrants could lead to cancellation of one of the courses; on-site registration may be possible, subject to availability of spaces.

***Web Search and Information Retrieval*, Carl Meyer (North Carolina State University) and Amy Langville (College of Charleston)**

Why is Google so good at what it does? There are a variety of reasons, but the fundamental thing that distinguishes Google and has put them so far ahead of other search engines is their patented PageRank concept. PageRank has revolutionized Web search to the extent that it has been charged in Federal Court with driving the direction of commerce on the Internet. Many in our community are therefore surprised when they learn that a technology of such consequence is predicated on the same mathematics that we teach daily to our undergraduate students. This is the reason for offering this short course.

***Geometry and the Calculus of Variations*, Robert Bryant (Duke University)**

Classical calculus of variations problems, such as the brachistochrone, the hanging chain, and the shape of soap films, can be incorporated into a first course on curves and surfaces by viewing them as examples of Riemannian surfaces and geodesics on them. In this course, these and other examples will be treated in geometric language and other problems along these lines will be suggested for further exploration.

***Some Deterministic Models in Mathematical Biology*, James Selgrade (North Carolina State University), Cammey Cole (Meredith College) and Huseyin Kocak (University of Miami)**

This short course will present and analyze discrete and continuous models from physiology (e.g., the Hodgkin-Huxley model), pharmacokinetics, and population biology (e.g., the chemostat model). The class will be conducted in a computer lab where participants will use the software Phaser to simulate model behavior. Familiarity with the material in undergraduate courses of ordinary differential equations and linear algebra will be helpful.

***Writing to Learn Mathematics—no Grading Required*, Mary Kay Abbey and Bette Daudu (Montgomery College)**

Would you like your students to write more? Would you add writing activities to your syllabus if the assignments would be graded without your input? If you answered yes to these questions, this is the workshop for you and your students. You will learn to use Calibrated Peer Review (CPR) - a template software program available on the web. Lessons for mathematics do exist and you will learn to write lessons tailored to your curriculum. Once written, lessons can be used again and again and even published on the UCLA server for national use.

**Registration form on back of this sheet**

## MAA-SE Short Course Registration Form

A printable version of this form is available on the meeting website at

<http://www.meredith.edu/math/se-maa05/>

Name \_\_\_\_\_

Address \_\_\_\_\_

\_\_\_\_\_

E-mail/phone \_\_\_\_\_

Indicate your preference of course by checking the appropriate line; if you have more than one choice, indicate your first choice as 1, your second as 2, etc.

\_\_\_\_ Web Search and Information Retrieval

\_\_\_\_ Geometry and the Calculus of Variations

\_\_\_\_ Some Deterministic Models in Mathematical Biology

\_\_\_\_ Writing to Learn Mathematics—no Grading Required

Mail this completed form with a check **payable to the MAA** in the amount of \$25.00 (non-refundable) before **February 11, 2005** (\$30 after February 11 and on-site registration) to the Secretary-Treasurer :

Martha L. Abell, Secretary/Treasurer, MAA-SE  
Department of Mathematics  
Georgia Southern University  
Statesboro, Georgia 30460

spectively, and his Ph.D. in Statistics from the University of North Carolina in 1993. His research interests are in applied probability, Markov chains, statistical climatology and time series. He will become the review editor of the Journal of the American Statistical Association in January of 2005, and he was recently interviewed on National Public Radio regarding research he had done on the return periods of hurricanes. Dr. Colin Gallagher returns after a two-year leave of absence at Chico State University in California, and Dr. Calvin Williams returns after a two-year leave of absence at the National Science Foundation in Washington, D.C. Calvin has also been named the Director of the Center of Excellence in Mathematics and Science Education at Clemson.

The Department of Mathematical Sciences will host the Third Annual Calculus Challenge in the Spring of 2005. This contest is open to all high school students. (Submitted by Mark Cawood)

#### **Davidson College** (Davidson, NC)

The recipient of our award for the top sophomore mathematics major, the William Vinson Mathematics Award, was Garrett Monda '06. And the honor for the top senior, the William G. McGavock Mathematics Award, went to Alex Sibley, '04. Alex is currently a graduate student at North Carolina State University studying Operations Research. Michael Flake '06 is a member of the Student Advisory Group for Math Horizons, published by the MAA. John Swallow's textbook, Exploratory Galois Theory was published by Cambridge. Ben Klein received the Davidson College 2004 Hunter-Hamilton Love of Teaching Award. Tim Chartier is a member of the editorial board of Math Horizons. Laurie Heyer, the inaugural holder of the L. Richardson King Professorship delivered a public lecture entitled, "Flips, Flops, and Genomes: A Mathematical Puzzle and its Applications" on October 19, 2004. Three days later, the 2004 Bernard Lecture, "Ladies of the Ring: A Tale of Two Women and Their Mathematics" was given by professor Georgia Benkhart of the University of Wisconsin. (Submitted by Donna Molinek)

#### **Duke University** (Durham, NC)

The third annual Duke Mathematical Journal conference was held from April 23-25, 2004. Speakers were Denis Auroux, Manjul Bhargava, Alexei Borodin, Tobias Colding, Kiran Kedlaya, Ezra Miller, Mircea Mustat and Gigliola Staffilani.

Visiting assistant professor Parviz Ghadimi was presented with the Duke Alumni Distinguished Undergraduate Teaching Award in September 2004. Ghadimi is the first mathematics professor to be honored with this award. Associate professors Joe Kitchen and Lang Moore retired this past spring. Each had been on the staff since the mid 1960's. Moore will continue as Executive Editor of the Mathematical Science Digital Library.

For the sixth time in seven years, a Duke team finished among the top three in the W.L. Putnam competition. The team of David Arthur, Nikifor Bliznashki and Oaz Nir finished third in the December 2003 competition. Melanie Wood '02 won the 2003 Morgan Prize for her papers on combinatorial

structures associated with algebraic curves and on algebraic number theory. She is now a graduate student in mathematics at Princeton University. (Submitted by David Kraines)

**East Carolina State University** (Greenville, NC)

A new B.S. program in mathematics was approved. Long-time faculty member Katy Sowell retired. Mike Spurr won the UNC Board of Governor's Award for Excellence in Teaching. The department also added Debbi Ferrell, Jim Pleasant, and Susan Sexton as lecturers. (Submitted by Chris Jantzen)

**Elon University** (Elon, NC)

Elon students chartered the North Carolina Nu Chapter of Pi Mu Epsilon on October 23, 2003. Dr. Robert Smith, national president of Pi Mu Epsilon, presented the charter to Elon students and faculty.

Aja Johnson, Karen Lawrence, and Amy Oliver presented at the Nebraska Conference for Undergraduate Women in February, 2003. Aja Johnson and Karen Lawrence presented at the Undergraduate Research Conference in Mathematics at Furman University in March, 2004. Finally, Aja Johnson, Karen Lawrence, and Amy Oliver gave talks at the Southeastern Section meeting in Clarksville in March, 2004. Beth Sherrif was selected as the Outstanding Mathematics Education Student for the central region of the North Carolina Council of Teachers of Mathematics.

Dr. Skip Allis, department chair, was awarded tenure and promoted to associate professor. Dr. Alan Russell was awarded tenure and promoted to associate professor. Dr. Jeff Clark was promoted to full professor. (Submitted by Jeff Clark)

**Emory University** (Atlanta, GA)

Last year, topologist Emily Hamilton won the Emory Williams Teaching Award, a campus-wide award. This is the seventh time the award has been won by a member of our department. Dwight Duffus has returned as chair after a one-year leave. We have several visitors: Yoshi Kohayakawa (fall, combinatorics, University of Sao Paulo), Andrzej Rucinski (spring, combinatorics, Adam Mickiewicz University), Julia Garibaldi (spring, combinatorics & analysis), Edward Goetze (spring, analysis), Bastiaan Braams (all year), and Charles Stone (all year). We are conducting a search for an analyst/differential geometer (assistant professor) and an open-rank search in computer science.

Next year, we will welcome two new hires: Aaron Abrams and Raman Parimala. Abrams will join the department as an assistant professor in the topology group. He graduated from UC Berkeley in 2000 and was a VIGRE postdoc at UGA. He is spending the current academic year at MSRI. Parimala holds an honorary doctorate from the University of Lausanne, Switzerland, and was an invited speaker at ICM Zurich in 1994. She will join the algebra group as an Asa Griggs Candler Professor. (Submitted by Skip Garibaldi)

**Floyd College** (Rome, GA)

Dr. Margaret S. Davis, Professor of Mathematics, retired at the end of the academic year 2003-2004. Ms. Joan Christian and Mr. Alan Hagerstrand joined the mathematics faculty as instructors in mathematics and learning support mathematics, respectively. (Submitted by Jack Sharp)

**Francis Marion University** (Florence, SC)

The Department of Mathematics welcomed Mrs. Sophia Waymyers (BS, Mathematics from Winthrop University and a MS in Mathematics from University of South Carolina). Dr. Thomas Fitzkee was awarded tenure and promotion to associate professor effective fall 2004. Dr. William P. Fox was the recipient of the Francis Marion University faculty's Research and Scholarship Award for 2003-2004. Over the past few years Dr. Fox has published several books, numerous journal articles and conference presentations, and is involved with orthopedic oncology research with doctors from the University of Miami leading to publications in medical journals and medical conference presentations. Dr. Roger W. Allen was named as the endowed chair recipient of the Mamie Gray Professor of Mathematics from 2004-2005.

Department members produced 16 journal articles and 24 conference presentations in 2003-2004. Dr. West and Dr. Fox are program committee members for ICTCM. Dr. Fox is chair of the Calculus Subcommittee and Mini-Symposium Committee. Dr. West is the chair of the Assessment Subcommittee and on the Program Committee. Dr. Fox is the Contest Director of the HiMCM and Associate Contest Director of the MCM (Mathematical Contest in Modeling). (Submitted by Tom Fitzkee)

**Furman University** (Greenville, SC)

Dave Penniston has been tenured and promoted to Associate Professor. Doug Rall is on sabbatical this year, and is working and traveling in Europe. Tom Lewis will be on sabbatical for our winter and spring terms. We are happy to welcome Yan Lyansky, who joins our department this year.

The spring of 2004 was busy for us. Along with hosting the annual Wylie Mathematics Tournament for high school students, we also welcomed Jeff Weeks, author of the well known *The Shape of Space*, as our Clanton Visiting Mathematician. In addition, our department hosted the Furman Undergraduate Mathematics Conference. We are looking forward to joint work with colleagues at Davidson College in organizing an annual undergraduate mathematics conference. The 2005 conference will be at Davidson. Stay tuned for details! (Submitted by John Harris)

**Gainesville College** (Gainesville, GA)

Delbert Greear, Thomas Hartfield, and Heather Howington were promoted to Assistant Professor. Beata Hebda and Gina Reed were promoted to Professor. Jerry Graveman received tenure. Heather Howington was selected to be in *Who's Who Among America's Teachers, 2004* and Gina Reed received the 2004 GMATYC Teaching Excellence Award. Charles Fowler, Heather

Howington, and Gina Reed received Innovative Teaching Grants. Deborah Bolding retired after twenty-nine years. The GC Math Tournament will be held April 2nd and additional information is available on the department web site. (Submitted by Gina Reed)

**Georgia College & State University (Milledgeville, GA)**

In June 2004, Dr. David DeVries retired, but we are glad that he is teaching with us part time this year. We have two new faculty members in tenure-track positions: Dr. Amy Kelley and Dr. Jason Stover. Dr. Kelley received her Ph.D. from the University at Albany, State University of New York in May 2004. Her areas of research are complex analysis and functional analysis. Dr. Stover earned a Ph.D. in Statistics at Purdue University in 2000 for work in smoothing chaotic time series. He worked as a statistician at SPSS Inc. and Convergys Corporation before joining our department. His current interests are in the field of statistical computing.

In spring 2004, several of our faculty members participated in MAA section meetings and programs. Dr. Laurie Edler presented a talk at the MAA Louisiana/Mississippi Section meeting hosted by Southeastern Louisiana University in Hammond, LA. Dr. Lila Roberts presented at the MAA Southeastern Section meeting held at Austin Peay State University in Clarksville, TN, and Dr. Martha Allen presented in the Project NExT-SE workshop there. Dr. Allen and Dr. Hugh Sanders are GC&SU's team members at the MAA's Supporting Assessing the Undergraduate Mathematics ongoing Workshop.

The newly formed student chapter of the MAA has increased its membership to 13 students and has become active in fundraising, recreational, and mathematical activities. Next semester, the chapter plans to send members to the Joint Mathematics Meetings in Atlanta and to sponsor a faculty lecture series of talks aimed at undergraduates. The MAA Chapter Faculty Advisors are Dr. Edler and Dr. Kelley. (Submitted by Martha Allen)

**Georgia Institute of Technology (Atlanta, GA)**

Working with Georgia Tech Math faculty, the Georgia Tech chapter of Pi Mu Epsilon, revived the GT High School Mathematics Competition (HSMC). Nearly 250 high school students from all over the southeast competed on 20 March 2004, for \$10k in scholarships and attended talks and games provided by GT students and faculty. Another \$10k will be up for grabs when the 2005 HSMC is held on 26 February 2005 -- visit the website ([www.math.gatech.edu/~pme/hsmc](http://www.math.gatech.edu/~pme/hsmc)) for details and contact Alan Michaels ([pme@math.gatech.edu](mailto:pme@math.gatech.edu)) with questions.

Constructive Functions Tech-04, an international conference, will be held on our campus November 7-9, 2004. This conference, honoring the 60th birthday of Ed Saff, will be an international conference covering all aspects of constructive function theory, potential theory and approximation theory. Ed Saff has played a key role in building scientific cooperation between mathematicians of many nations. Accordingly, the conference aims to attract mathematicians from all around the world, especially young graduate mathematicians





Master of Science in Mathematics  
with concentrations in  
*Applied Mathematics, Statistics, and Computer Science*

**The Graduate Program:** The M.S. degree in Mathematics provides a broad overview of applied mathematics, statistics, and computer science as well as more in depth study in one area. The program of study consists of core courses in numerical analysis, operations research, discrete simulation, and statistics, electives in the field of concentration, and a research project. Students are prepared for careers in industry, teaching careers at the post-secondary level, and doctoral study.

**The Faculty:** Faculty members are noted for teaching excellence. Their research interests include approximation theory, differential equations, fuzzy logic, mathematical biology, mathematical modeling, numerical analysis, parallel computing, pattern recognition, signal and image processing, and quality control.

**Financial Assistance:** Georgia Southern provides a wide range of financial assistance opportunities for eligible graduate students. Several graduate assistantships, which provide a stipend and reduced tuition, will be available for Fall 2005. Duties include grading and assisting in computer laboratories.

**Requirements for Regular Admission:**

- 1) a bachelor's degree in a mathematical, science, or engineering discipline,
- 2) the Graduate Record Examinations (GRE) scores,
- 3) courses in calculus, probability, and linear algebra; the applied mathematics concentration also requires ordinary differential equations and introductory analysis; the computer science concentration also requires data structures and computer organization and architecture.
- 4) demonstrated proficiency in a computing language.

**For Further Information Contact:**

Dr. Laurene Fausett,  
Graduate Program Director,  
Department of Mathematical Sciences  
Georgia Southern University, Statesboro, GA 30460-8093  
(912) 871-1972 or (912)681-5390  
[LFausett@GeorgiaSouthern.edu](mailto:LFausett@GeorgiaSouthern.edu)

and graduate students. (Submitted by Tom Morley)

**Georgia Perimeter College, Clarkston Campus** (Decatur, GA)

Madelyn Gould and Alice Pierce were promoted from Assistant Professor to Associate Professor effective 9/04. Jean Millen won the 2004 National Institute of Staff and Organizational Development (NISOD) National Teaching Excellence Award.

At the Student Mathematics League Test given by AMATYC (03-04) GPC finished 32nd (out of 158 participating colleges) and 1st in the Southeast region. At the Gainesville College Mathematics Tournament (4/3/04) GPC finished 3rd in the Team Competition and had a student (Hai Dang) finish 3rd in the Individual Competition.

Hewlett Packard/MESA (Mathematics, Engineering, Science Achievement) awarded Georgia Perimeter College a grant in June, 2004 for implementation during the 2004-2005 academic year on the Clarkston Campus. The grant (\$80,000+ in equipment and funds) includes computers for use in a Student Center and HP-Mobile classroom consisting of 18 laptops and recharging/storage cart designated to help students with math-based majors. The purpose of the programs funded by the grant will be to assist educationally disadvantaged students to excel in math and science so they can attain baccalaureate degrees in math-based fields. Dr. Margaret Ehrlich received a NSF mini-grant from the National Computational Science Institute after attending their workshop at Pellissippi State College in May '04.

Georgia Perimeter College now is on a list with thirteen other Georgia institutions recognized by Georgia Institute of Technology as transfer institutions for the engineering program. The Regents Engineering Transfer Program (RETP) at Clarkston campus is now available to all Georgia state residents who are students of GPC and seek admission to Engineering disciplines at Georgia Tech. The 18th Annual Georgia Perimeter College Mathematics Conference is February 18 – 19, 2005. For information, go to [www.gpc.edu/~gpcmathc](http://www.gpc.edu/~gpcmathc). (Submitted by Virginia Parks)

**Georgia Southern University** (Statesboro, GA)

We finally have a permanent department chair! MAA-SE's own secretary/treasurer Martha Abell is the new Chair. John Rafter retired this summer after 20 years with the department. We had one new tenure-track hire this fall. Frederic Mynard joined us from the University of Mississippi. His Ph.D. is from the Universite de Bourgogne, France. Broderick Oluyede was promoted to Associate Professor, Steven Damelin was both promoted and granted tenure, and Laurene Fausett was granted tenure.

The 2004 Mathematics Tournament was held on March 6. We had over 800 junior high and high school participants. This year's tournament will be held January 22, 2005. (Submitted by Patricia Humphrey)

**Guilford College** (Greensboro, NC)

Rudy Gordh (current chair) was recognized for thirty years of service

at an Awards Luncheon on October 28, 2004. (Submitted by Rudy Gordh)

**Jacksonville State University** (Jacksonville, AL)

The department will continue to host the Calhoun County Math Tournament, and will help administer the Alabama Science Olympiad. In May of 2004 Jan Case was awarded the JSU College of Arts and Sciences "Distinguished Teaching Award", and Ann Edwards was awarded the JSU College of Arts and Sciences "General Studies Award for Teaching Excellence". Ed Smith published, "A New Packing Density Bound in 3-space" in the journal *Discrete and Computational Geometry*. Jeff Dodd is serving a one year term as President of the JSU Faculty Senate. (Submitted by Jeff Dodd)

**Kennesaw State University** (Kennesaw, GA)

The new chair is Dr. Victor Kane who has a Ph.D. in biostatistics from Florida State University. He joins us after a career at Ford Motor Company where he held several administrative positions including plant manager in Cincinnati. New Tenure Track faculty are Dr. Teresa Banker, Dr. Michael Capps, Dr. Liancheng Wang. New lecturers are Brad Feldser and Sanjay Mundkur. Dr. Meghan Burke won the University Distinguished Teaching Award. Sean Ellermeyer, along with biology colleague Jerald Hendrix, won a Foundation prize for a paper they published. Marlene Sims was promoted to Associate Professor. Dr. Philippe Laval and Dr. Mary Garner were each promoted to Associate Professor and tenured. Dr. Tom Thomson and Mr. Tom Gooch retired this past year. (Submitted by Virginia Watson)

**Lenoir-Rhyne College** (Hickory, NC)

Dr. Doug Burkholder started this fall as Associate Professor of Mathematics at Lenoir-Rhyne College. He comes with 19 years teaching experience in Kansas and a year teaching in Quito Ecuador. Dr. Burkholder received his Ph.D. in Ring Theory from the University of Iowa in 1984. Last year's graduate, Kat Brownell, is in graduate school at Indiana University. Two students, Robert Vaughan and Kristy Beam, participated in the Virginia Tech Contest last Saturday. (Submitted by Doug Burkholder)

**Louisburg College** (Louisburg, NC)

Tyrone Washington has received the Naomi Dickens Shaw Faculty Teaching Excellence Award for 2004. Mr. Washington is in his fourth year of teaching at Louisburg College. (Submitted by Martha Farmer Bragg)

**Mercer University** (Macon, GA)

There are two new faculty in the Mathematics Department. Dr. Michael Poole, who joins us as a Visiting Professor, holds degrees from Georgia Southern, Clemson, and Auburn. He taught at Macon State College for more than 25 years before his retirement there. Franklin Edge, Visiting Instructor, earned an M.A. in mathematics at Appalachian State University and had been a full-time lecturer there. Frank also holds a B.S. in physics from the University

of Washington, an M.A.T. from Johns Hopkins, and is working towards a Ph.D. in math. ed. at the University of Louisville. Dr. Hope McIlwain has been promoted to Associate Professor of Mathematics. Dr. David Nelson is the new Chair of the Mathematics Department.

The Twentieth Annual Mercer University High School Mathematics Contest will be held November 13, 2004. On April 15-16, 2005, the Mercer University Mathematics Department will host a conference for students and faculty interested in undergraduate mathematics research. The event will take place in conjunction with the Georgia MAA State Dinner and will include talks by undergraduates about their research, a social event, a mathematics contest for teams of students, and lectures by Dr. De Witt Summers of Florida State University. Partial funding will be available for student presenters. Registration forms and abstract submission information can be found at <http://www.mercer.edu/math/muurmac>. This conference is partially supported by MAA NSF-RUMC grant DMS - 0241090. (Submitted by Curtis Herink)

#### **Meredith College (Raleigh, NC)**

The Department has received a National Science Foundation CSEMS grant of nearly \$385,000 for undergraduate scholarships. Paul Schuette is the principal investigator for the grant with co-principal investigators Danny Green, Jennifer Hontz, Virginia Knight, and Barry Koster. We are pleased to announce that E. Jacquelin Dietz has joined the faculty. Jacquelin spent 26 years in the Department of Statistics at North Carolina State University after graduating with a degree in statistics from the University of Connecticut. (Submitted by Jennifer Hontz)

#### **North Carolina A&T State University (Greensboro, NC).**

Dr. Gilbert Casterlow, Jr., Associate Vice-Chancellor for Continuing Education and Summer Sessions, and Professor of mathematics, is ill, battling cancer. His prognosis is hopeful. Dr. Kossi Edoh was appointed an Associate Professor, beginning July 2004. Dr. Edoh earned his Ph.D. from Simon Fraser University. Dr. Barbara Tankersly was appointed an Assistant Professor, beginning July 2004. Dr. Tankersly earned her Ph.D. from Howard University. Her area is combinatorics (enumerative). Dr. Ahmed Deeb was appointed Visiting Assistant Professor, beginning July 2004. Dr. Yaw Kwei was appointed visiting Lecturer, beginning July 2004. His Ph.D. is from North Carolina State University. Mrs. Sheila Littlejohn was appointed a Visiting Lecturer, beginning July 2004. Mrs. Littlejohn earned her Masters degree from the North Carolina A&T State University.

Dr. Robert Mers is serving as co-chairman and member of the steering committee of the North Carolina State Employees Combined Campaign at North Carolina A&T State University in 2004. Dr. Janis M. Oldham again served as a panelist for the 2004 National Science Foundation Graduate Research Fellowship Program (GRFP) and was appointed to a three-year term on the Human Resources Advisory Council of the Mathematical Sciences Research Institute in Berkeley, CA, beginning March 2004.



## Department of Mathematics

### Graduate Programs

Programs leading to MA and PhD degrees are available in Algebra, Analysis, Applied Mathematics, Approximation Theory, Control Theory, Differential Equations, Probability, Statistics, Theoretical Computer Science, Topology and other areas.

### The Department

The research of our 31 faculty members represent most areas in pure and applied mathematics. The Department includes *The Institute for Constructive Mathematics* which performs applied research for government and industry. Two international journals have their editorial base at our department: *Abstract and Applied Analysis* and *Journal of Theoretical Probability*.

### Financial Assistance

A limited number of University Graduate Fellowships of minimum \$10,000 for 9 months are available for **new students** starting Fall 2005. They carry a tuition waiver and no service for the department is required. Funds can be supplemented with a partial Teaching Assistantship. Teaching Assistantships with minimum of \$12,000 for 9 months with tuition waiver are available. Students holding these awards perform instructional duties for the Department. Summer Teaching Assistantships are also available. A limited number of students are awarded Tharpe Scholarships in addition to their Teaching Assistantship or Graduate Fellowship. These awards range from \$1,000 to \$5,000.

### The University and Tampa

The University of South Florida is a large and diverse community with the main campus on 1,748 acres located on the outskirts of Tampa. The warm sunny climate allows outdoor activities throughout the year. Tampa Bay is a resort area offering numerous recreational and cultural attractions.

**For more information:** **visit:** [www.math.usf.edu](http://www.math.usf.edu), **call:** 813-974-9566 or 813-974-5329, **e-mail:** [ga@math.usf.edu](mailto:ga@math.usf.edu), **write:** Graduate Admissions Director, Department of Mathematics, University of South Florida, PHY114, Tampa FL 33620-5700.

Two A&T graduate students, Latoya Silochan and Kashonda Bynum worked for 10 weeks (May 17 - July 23) at the Naval Undersea Warfare Center, Newport, RI. Under the supervision of Dr. Giles Warrack and Dr. Roy L. Streit (NUWC), the students worked on a report "Applying Density Estimation and Smoothing Techniques to Tracking Problems".

Dr. Alexandra Kurepa is spending a year (January-December 2004) on research leave at Wake Forest University working on an interdisciplinary project in Mathematical Economics. Dr. Alexandra Kurepa was awarded a FUTURES grant to establish and develop an Interdisciplinary Seminar in Mathematical Economics and Business. The seminar involves 16 students and faculty from the Departments of Mathematics (co-PI G. Warrack and P. Shelton) and Economics (co-Pi M. Burkey, S. Morgan and V. King) at NCA&T, working on various projects in Mathematical Economics. The seminar also features invited guest speakers every month, and those sessions are open to the public.

On April 22 the Department of Mathematics held its 9th annual Math Awareness Day as part of the national observance of Math Awareness Month. The event was organized by Dr. Alexandra Kurepa as a student conference, with NCA&T and Wake Forest graduate student presentations as well as undergraduate paper and poster sessions.

Dr. Shea D. Burns again served as faculty coordinator for the 2004 NASA SHARP program held at North Carolina A&T State University. The NCA&T NASA SHARP, an eight week residential program beginning in June, had high school participants from across the country, the District of Columbia, and Puerto Rico. NC A&T faculty served as mentors to the participants who conducted research projects in mathematics, chemistry, engineering, and computer science. In April 2004 the department once again hosted high school students participating in the state high school math contest. Dr. Bampia Bangura coordinated the effort. Dr. Bangura was assisted by the NCA&T chapter of the NCCTM, Pi Mu Epsilon member, and faculty volunteers.

Dr. Dominic Clemence was in South Africa from August to October, 2004, at the African Institute for the Mathematical Sciences, in Muizenburg, South Africa. Collaborations ensued with faculty from University of Botswana (epidemiology), University of the North (sickle-cell models), and University of Pretoria (reaction /diffusion equations and geophysics). The work begun and discussed was related to efforts by the CMRG, with the goal of further development of collaboration. Dr. Dominic Clemence served as an Instructor for the EDGE Program, held at Spelman College, June 2004.

Though North Carolina A&T State University is moving toward its goal of becoming an interdisciplinary centered university, the decision to merge the mathematics, physics, and chemistry departments into one unit, to take place summer 2004, was postponed. (Submitted by Janis Oldham)

#### **North Carolina State University (Raleigh, NC)**

Lavon Page was appointed Special Assistant to the Provost for Implementation of LITRE, our SACS self-study. Agnes Szanto received a Faculty

Early Development Award from the NSF. Pierre Gremaud was promoted to Full Professor. Semyon Tsynkov was promoted to Associate Professor. Robert Ramsay and Kwangil Koh retired in Spring 2004. Kailash Misra is on Sabbatical Fall 2004. Zhilin Li was on Sabbatical Spring 2004. Jesus da Mota is a Visiting Scholar. Mou-Hsiung Chang is an Adjunct Professor. Jean-Pierre Fouque is Interim Department Head and Loek Helminck is Interim Associate Department Head. (Submitted by Jeffrey S. Scroggs)

#### **Pellissippi State Technical Community College (Knoxville, TN)**

We welcome two new full-time faculty members this fall. Daryl Thomas, Master of Science, Applied Mathematics, University of Tennessee, in a tenure-track position and Amy Tankersley, Master of Science, Mathematics Education, University of Tennessee, in a full-time temporary position. Elizabeth Wade received tenure. Meg Moss was promoted from Assistant to Associate Professor. Bobby Jackson was promoted from Instructor to Assistant Professor. A team of math faculty, Rebecca Blackwell, Mary Monroe-Ellis, and Nancy Pevey, received the College Innovations Award for 2004. They developed and implemented successful combination mathematics courses. Dave Vinson was named Outstanding Full-Time Faculty for his service to the College as Faculty Council representative on the Tennessee Board of Regents (TBR) Faculty Sub-Council. Dave was elected Chair of the TBR Faculty Sub-Council. Jonathan Lamb received an extension of the NSF CSEMS grant for scholarships, faculty mentoring, and professional mentoring for students majoring in mathematics, computer science, engineering or related technologies. The grant targets talented, low income students and students in under-represented populations. Karla Foss retired after 25 years of service, Linda Knauer retired after 17 years, Nan Burwell retired after 14 years, Bob Pesut retired after 14 years and Glenda Taylor retired after 13 years.

The department will host the Third Annual Tennessee Mathematical Association of Two-Year Colleges (TMATYC) Conference on April 22-23, 2005. (Submitted by Catherine Williams.)

#### **Presbyterian College (Clinton, SC)**

Michael G. Smith (senior) is the first winner of the department's Robert V. Hogg Award in Mathematical Statistics, given to the most promising student in field. Heather Cheatum (senior) was a participant in an REU at the University of Tennessee. Shannon Innes (senior) is coordinating free mathematics tutoring on behalf of the Student Government Association. Dr. Doug Daniel and Dr. Clint Harshaw were participants in the local CHAMPS meeting coordinating teaching and training for middle and high school students. (Submitted by Clint Harshaw)

#### **Samford University (Birmingham, AL)**

On Nov. 4, 2004 the AMS game, "Do The Math!", will take place on the campus of Samford University. The game involves eight high school contestants from the area that were chosen on the basis of a qualifying exam.

**THE UNIVERSITY OF SOUTH CAROLINA  
THE DEPARTMENT OF MATHEMATICS**



The Department offers graduate programs leading to the M.S., M.A., and Ph.D. degrees in Mathematics. In addition there are teaching-oriented non-thesis degrees—the Master of Mathematics and Master of Arts in Teaching.

Areas of emphasis in pure mathematics include algebra, analysis, differential geometry, logic, number theory and topology. Emphasis in applied mathematics is offered in approximation theory, differential equations, discrete mathematics, numerical analysis, and wavelets. The Industrial Mathematics Institute in the Department fosters advanced research in areas of mathematics having the capacity or potential for industrial application.

**FINANCIAL AID**

The Department expects to award 12 teaching assistantships for Fall 2005 with academic year stipends starting at \$16,000. Assistantships require three to five contact hours per week. Summer support is available. Outstanding applicants will receive consideration for fellowships which supplement Departmental support. These include a renewable \$3,500 College of Science and Mathematics Fellowship.

For information and application materials, write to  
Director of Graduate Studies  
Department of Mathematics  
University of South Carolina  
Columbia, SC 29208  
Home page: <http://www.math.sc.edu/>  
Email: [graddir@math.sc.edu](mailto:graddir@math.sc.edu)



Mike Breen, of the AMS will be the MC. There will be two games. The contestants are competing for a \$2000 prize and a chance to go to Atlanta in January to compete for a \$4000 prize. (Submitted by Bruce W. Atkinson)

#### **Southern Polytechnic State University (Marietta, GA)**

Larry Wang joined our faculty as an Assistant Professor. Professor James Kropa retired, but is currently teaching as an adjunct. Associate Professor Joel Fowler accepted responsibilities as Department Chair last August. Associate Professor Jack Pace spent 2003-2004 at Georgia Tech as part of the faculty development program. Steve Edwards was promoted to Professor. Associate Professor Barry Flannery passed away in January. (Submitted by Steve Edwards)

#### **Spelman College (Atlanta, GA)**

Spelman College recently celebrated 45 years of service of Dr. Gladys T. Glass, and 30 years of service of Dr. Sylvia Bozeman. Each was presented with a plaque saluting the long years of "Dedication, Energy, Vision, Optimism, Thoughtfulness, Inspiration, Openness and Nourishing which you have generously given to help to shape the minds of so many generations of Spelman women. That spells DEVOTION!" Two new tenure track hires have recently joined us; Tasha Inniss, who obtained her Ph.D. in Applied Math from the University of Maryland in 2000, and Mohammed Tesemma who just finished his thesis in algebraic invariants at Temple University in August. Dr. Alla Baloueva continued to teach for us this year, and like many faculty here, she is also engaged in research with undergraduate students.

This summer from June 7 to July 2, 2004, Spelman College hosted the EDGE program (Enhancing Diversity in Graduate Education), which is headed up nationally by Rhonda Hughes of Bryn Mawr and Sylvia Bozeman from Spelman. Fourteen students from as many institutions took part in the program, which is designed to assist women in making the transition from undergraduate to graduate programs in the mathematical sciences. The students took analysis and algebra courses and attended guest lectures and workshops. Our very own Yewande Olubummo was the local coordinator. In connection with the EDGE Program, Spelman College also hosted a symposium which attracted more than 100 participants, "The Graduate School Experience for Women in Mathematics: From Assessment to Action", June 25-26, 2004 (co-sponsored by Bryn Mawr College). In addition, Nagambal Shah and Monica Stephens ran the NSF funded summer Spelman Environmental Statistics Summer Institute. This ties in with a new practicum course on Environmental Statistics and parallels a related initiative at North Carolina State.

In March, Jeffrey Ehme gave an MAA short course on Public Key Cryptography at the regional meeting in Clarksville, TN. On October 21, to mark the 90th birthday of legendary recreational mathematics popularizer Martin Gardner, department chair Colm Mulcahy inaugurated a new MAA FOCUS Online column on mathematical card tricks, called Card Colm. (Submitted by Jeffrey Ehme & Colm Mulcahy)

**Troy University (Troy, AL)**

There was a flurry of activity during 2003-04. Our greatest achievement was on April 17, 2004, when we had the installation ceremony and initiation of the charter members into our newly-founded Alabama Eta Chapter of Pi Mu Epsilon. We are the 308th such chapter in the nation, and had 25 student charter members. In addition, we held a one-day Troy University system-wide mathematics conference in March 2004, which included students and faculty from all main Troy University campuses (Troy, Montgomery, Dothan). We had four faculty research and technology presentations, four student research presentations, our second annual calculus competition, and an invited speaker from the Alabama Department of Education who spoke on The No Child Left Behind Act. This was our first of hopefully many such forums! We continued our mathematics seminar, in which students, Troy faculty, faculty from other institutions, and industrial mathematicians participated. We held 21 such seminars. We had two students publish solutions to problems in the Alabama Journal of Mathematics, two students give presentations at the 23rd Annual Mathematics Symposium at Western Kentucky University, one student give a presentation at the annual meeting of the Alabama Association of College Teachers of Mathematics, and two students accepted to graduate school. We also have several students working on independent research projects with faculty who have or will have their work published.

As for faculty news, our chairperson Diane Porter was PI and Director of the project, Conceptualizing Math. This was a grant administered by the State Department of Education with funding from Title II and Title V. A No Child Left Behind initiative, the project involved helping fifth and sixth grade teachers close the achievement gap of their students in mathematics through teaching strategies that include manipulatives, cooperative learning groups, technology, writing, and inquiry-based learning. Kenneth Roblee had graph theory research papers published in both the European Journal of Combinatorics and Australasian Journal of Combinatorics. Vitaly Voloshin was an invited speaker at the Combinatorics '04 Conference in Catania, Italy during September 2004. His lecture was entitled "Coloring Mixed Hypergraphs: from Combinatorics to Philosophy." He was only one of three invited speakers from the United States. Finally, Sergey Belyi had research papers published in Linear Algebra and Its Applications and in Physics Letters A.

For the 2004-05 academic year, we plan to host another mathematics conference for colleges and universities in Southeastern Alabama. This will be a forum to share mathematical research, teaching innovations, applications, history, and any other mathematical interest, as well as conduct our third annual calculus competition. For detailed information about our department, check out our website at <http://www.troyst.edu/mathematics>. (Submitted by Ken Roblee)

**Union University (Jackson, TN)**

We are in the process of splitting the Department of Mathematics and Computer Science into two separate departments. Bryan Dawson has stepped

down as department chair; Troy Riggs has stepped in to take his place. Matt Lunsford and Bryan Dawson have been promoted to the rank of professor. Long-time department member Don Richard has transitioned into a 3/4 time appointment. Bryan Dawson is now the webmaster of the Association of Christians in the Mathematical Sciences. (Submitted by Bryan Dawson)

#### **University of North Alabama** (Florence, AL)

Ms. Jean Henderson, Assistant Professor of Mathematics, has returned from a two-year leave of absence during which she completed the course requirements for a doctorate in Computer Science Education at the Florida Institute of Technology. Dr. Cindy Stenger, Associate Professor of Mathematics, had an article, "Intimations of Infinity", published in the August, 2004 issue of Notices. Mrs. Patricia Roden, Assistant Professor of Mathematics, has been awarded the Elizabeth Gaines Mann Professorship of Mathematics for the 2004 – 2005 academic year. This honor recognizes outstanding teachers in the Department of Mathematics and Computer Science. It includes both a 3-hour course load reduction and a stipend to support scholarly activity. She will use this award in furthering her doctoral studies at the University of Alabama in Huntsville. (Submitted by David Muse)

#### **University of North Carolina at Asheville** (Asheville, NC)

Dr. Sam Kaplan was granted tenure and was promoted to associate professor. He was also named the 2004 Distinguished Teacher in the Natural Sciences at UNCA. Dr. Steve Patch is spending the fall semester studying spacial statistics as part of his off-campus scholarly assignment.

The 2004 Parsons' Lecture featured Princeton professor John Conway, who dazzled the audience with his talk entitled "Tangles, Bangles, and Knots." Dr. Doris Schattschneider of Moravian College will deliver the 2005 Parsons' Lecture on April 4 at 7pm. A leading expert on the artist M. C. Escher, Dr. Schattschneider will discuss the mathematics underlying Escher's work.

In May, UNC-Asheville hosted the western division of the North Carolina State Math Finals, which tested area high school and middle school students in algebra and geometry. This fall the department fielded yet another team for the Virginia Tech Regional Mathematics Contest, and students are gearing up for another Putnam competition in December. The Department seeks to hire another tenure-track mathematician to begin in Fall 2005. Please see [www.unca.edu/math](http://www.unca.edu/math) for more information. (Submitted by Mark MacLean)

#### **University of North Carolina at Chapel Hill** (Chapel Hill, NC)

One of our new postdocs is Neil Martinsen-Burrell who came here for a two year postdoc with professors Rich McLaughlin, Chris Jones, Roberto Camassa and Alberto Scotti studying Scale Dependent, Heavy Tailed Distributions in Geophysical Flow. He recently received his Ph.D. in Applied Math from the University of Colorado-Boulder with a thesis on vortex interactions in a model of fluid flow in the ocean. Prof. Sue Goodman was awarded the Bank of America Honors Distinguished Term Professorship this year and will be

developing interdisciplinary Honors seminars. Prof. Gregory Forest has been named the Grant Dahlstrom Distinguished Professor of Mathematics. He is also the Co-Director of the new Institute for Advanced Materials, NanoScience and Technology at UNC-CH.

Most people celebrate birthdays by throwing a party. But friends and colleagues of UNC math professor Joseph A. Cima had a different idea for commemorating Cima's 70th birthday: they organized a conference in his honor. The conference, titled "Recent Advances in Operator Related Function Theory," was held August 4-6, 2004, at Trinity College in Dublin, Ireland, to belatedly celebrate Cima's birthday and to honor him for 45 years as a mathematics scholar.

Cha-Cha Days (a reference to Chapel Hill, NC, and Charleston, SC) took place at the College of Charleston September 17-19. This was the first of an annual workshop that will alternate between UNC and the College of Charleston. A total of 18 workshops were held; topics included new drag phenomena, thin films, slender body mechanics, web search engines and mathematical models for word order in Middle English. The goals of this interdisciplinary workshop are to expose students to graduate and postgraduate research activities, highlight current research in applied and computational mathematics and create a more diverse pool of current and future scientists and mathematicians. (Submitted by Ladnor Geissinger)

#### **University of North Carolina at Greensboro (Greensboro, NC)**

There are four new faculty members for Fall 2004. C.E. Davis, Assistant Professor, Ph.D. in Mathematics Education, NC State University (2003) has research interests in Teacher Subject Matter Knowledge. Sat Gupta, Professor, Ph.D. in Statistics, Colorado State University (1987), Ph.D. in Mathematics, University of Delhi (1977) has research interests in Sampling Designs, Time Series Forecasting, and Biostatistics. Jan Rychtar, Assistant Professor, Ph.D. in Mathematics, University of Alberta (2004) has research interests in Functional Analysis, Banach Spaces, Topology, Optimization, and Game Theory. There is one visiting faculty member for Fall 2004. B. Sury, Ph.D. in Mathematics, Tata Institute, Mumbai, India (1991) has research interests in Algebraic Groups, Number Theory. (Submitted by Igor Erovenko)

#### **University of North Carolina at Pembroke (Pembroke, NC)**

The faculty have moved back into a newly renovated Science Building. Dr. Steve Bourquin has joined the mathematics faculty. Dr. Bourquin's area is Mathematics Education. (Submitted by Don E Beken)

#### **University of North Carolina at Wilmington (Wilmington, NC)**

There were four new faculty in the department. Dr. Randy Lattimore, Assistant Professor in Mathematics Education received his Ph.D. in Mathematics Education from Ohio State University in 1996. He also holds a B.S. in Mathematics (1989) from Savannah State University and a M.A. in Mathematics (1992) from Ohio State University. Before coming to UNCW, Randy was

on the faculty at Wayne State University for seven years. He also served as Mathematics Instructor for the Math Corps, the Young Scholars Program, and the Upward Bound Program. Randy received the College of Education Award for Teaching Excellence from Wayne State University in 1998 and the Young Educators Award by College of Education Alumni Advisory Board from the Ohio State University in 1999. Dr. J. Denise Terry, Assistant Professor in Mathematics Education received her Ed.D. in Curriculum and Instruction from George Washington University in August 2004. She also holds a Bachelor's degree in Applied Mathematics (1995) and a Master's degree in Mathematics Education (2000) from North Carolina State University. Before coming to UNCW, Denise was on the faculty at Livingstone College. She also worked as a mathematics teacher in the NC public schools for a year. Denise served as Director of Math Content Development at PBS TeacherLine, research assistant at George Washington University, and teaching assistant at North Carolina State University. Dr. Jianzhong Sun, Visiting Assistant Professor in Mathematics received his Ph.D. in Applied Mathematics from Purdue University in August 2004. He also holds a M.S. in Computer Science (2003) from Purdue University, a M.S. in Computational Mathematics (1997) and a B.S. in Computational Mathematics (1995) from the University of Science and Technology of China. Jianzhong held research associate and teaching assistant positions at Purdue University. Ms. Sonia Brinson Parker, Lecturer in Mathematics, received her Masters of Science in Mathematics from the University of North Carolina at Wilmington in December 2003. She also holds a B.S. degree in Mathematics with a minor in Physics from Fayetteville State University (May 1993). She worked as a mathematics teacher for the NC public school system for 3 years.

Our retired faculty members are still making great contributions in supporting the scholarship awards for departmental majors. In the spring of 2004, Mr. Carl Nelson (statistics faculty in our department 1982-1988) and his wife, Patti decided to make a \$25,000 endowment to the Mathematics and Statistics Department to set up the A. Carl Nelson, Jr. Scholarship. We currently have the A. Carl Nelson Award in the amount of \$250 annually from the donations made by the Nelson family. It will take about three years for the \$25,000 endowment to be fulfilled. One year after that time, the award will be replaced by the scholarship with a permanent endowment and significantly increased amount. (Submitted by Dargan Frierson)

#### **University of South Alabama (Mobile, AL)**

Our department is pleased to welcome three new faculty members: Dr. Abhijit Champanerkar (Ph.D., Columbia University), Mrs. Sonna Farmer (MS, Mississippi State University) and Mr. Kent Murdick (MST, Florida Atlantic University). We want to congratulate Cornelius Pillen, Gene Crossley, Fred Dodd, Richard Hitt and Cynthia Crumb. Cornelius was promoted to Professor of Mathematics, Gene and Richard were both awarded the Emeritus Professor of Mathematics designation, Fred was nominated Emeritus Associate Professor of Mathematics and Cyndi is the 2004 recipient of our College of

Arts and Sciences Outstanding Teaching Award.

Our undergraduate and graduate programs have both grown: we can count about 130 students among our undergraduates. We are proud of our majors: three of them received departmental scholarships, eight were the recipients of the University Scholarship in Mathematics and Statistics, and three participated in Research Experiences for Undergraduates this summer, either at SUNY Potsdam or at Miami University.

The Mobile Mathematics Circle continues its activities, thanks to the dedication of Vasily Prokhorov, Scott Carter and Cornelius Pillen. The Circle meets weekly, presenting interesting, extra curricular mathematics and engaging in problem solving a group of about 60 local high school students.

A number of grants supported our faculty activities: the NSF, the Alabama Center for Estuarine Studies and the Alabama Space Grant Consortium were among the grant awarding agencies. More than 27 refereed articles, books, and book chapters written or edited by the faculty in our department were accepted or published. Among these was the book "Surfaces in 4-dimensional space" (Springer) co-authored by Scott Carter. We had a very active colloquium series with several outside speakers. Among our visiting faculty, we welcomed a professor from Australia (Fall 2003) and one from Germany (Summer 2004). Our campus hosted workshops and symposia in knot theory, knotted surfaces, and 4-dimensional space. Our faculty co-organized the Geometric Group Theory on the Gulf Coast conference and the Statistics Forum in Oregon. Xin-Min Zhang, while on sabbatical leave, visited and gave presentations in several Chinese universities. Our faculty attended regional, national, and international conferences and workshops. Whether to present plenary talks and papers, to participate as invited speakers, or to perform professional service, we visited fourteen different USA states, in addition to traveling abroad to Canada, China, India, Italy, Japan and Poland. For further or more detailed news and information, please visit our web site at <http://www.usouthal.edu/mathstat>. (Submitted by Gabriella Segalla-Pickett)

#### **University of South Carolina (Columbia, SC)**

This year three of the four students at the University of South Carolina receiving the prestigious Barry M. Goldwater Scholarship were mathematics majors. The winners were Matt Elder, a sophomore double major in mathematics and computer science, Jae Jun Kim, a junior double major in mathematics and chemical engineering, and Jason Owens, a junior double major in mathematics and chemical engineering. Andreea Brezai was awarded a Woody Scholarship for 2004-05 from the Actuarial Foundation. (Only four such scholarships are awarded each year.) Track star and math major Jenny Lake was designated as an Academic All American. Jeremy Wolfe a double major in mathematics and Russian won the highly prestigious Harry S. Truman Scholarship. This \$26,000 scholarship is awarded to 77 college juniors who intend to pursue graduate study and careers in public service. Jeremy was also a finalist for the National Security Education Program. The Department ranked 118 nationally on the Lowell . L. Putnam Exam (out of about 450

teams). The team members were Jae Jun Kim, Jason Owens, and Matt Elder. Elizabeth Perez received the Outstanding First Year Graduate Student Award, while Hua Wang received the Outstanding Graduate Student award.

Jerry Griggs has taken over as Editor-in-chief of the SIAM Journal on Discrete Mathematics. Dr. James W. Roberts won the AMOCO Teaching Award. This is the University of South Carolina's highest award for undergraduate teaching. It comes with a stipend of \$2500. Dr. Susanne Brenner won the USC Educational Foundation Research Award for Science, Mathematics, and Engineering marking the second year in a row that a faculty member in Mathematics received this award. Professor Brenner was also the recipient of a 2004 West Chester University Distinguished Alumni Award (Pennsylvania). In addition, she was appointed to a second term on the editorial board of the Notices of the American Mathematical Society. Dr. Peter Nyikos was a Visiting Professor at the Alfred Rényi Mathematical Institute of the Hungarian Academy of Sciences. Ed Dickey, an adjunct professor in the Mathematics Department, has been named Chair of the Department of Instruction and Teacher Education in the College of Education. He also served as Program Chair for the NCTM Southern Regional Conference November 6-8, 2003 in Charleston, SC. He has also been appointed to the Mathematics Advisory Committee of the Knowles Science Teaching Award. Dr. Matthew Miller is serving as Associate Director of MSRI in Berkeley. Previous Ph.D. graduate Daphne Der-Fen Liu won the "Outstanding Professor Award" at Cal-State L.A. for 2002-2003.

Dr. Richard Hudson retired from the department this year. During his career, Richard published over 64 research articles, many of them appearing in such prestigious journals as *Crelle*, *J. of Number Theory*. Dr. Robert Sharpley and Dr. Xian Wu will be on leave in the fall semester. We had two new tenure-track faculty members joining the department: Lili Ju (Ph.D., Computational Math, Iowa State University, May 2002) and Lincoln Lu (Ph.D., Combinatorics, University of California at San Diego, July 2002). Professor Wolfgang Dahmen, from RWTH Aachen, visited the department and the IMI during the fall 2003 semester. Also, Professor Lutz Weis (University Karlsruhe) visited for two months early last fall. Professor Martin Stynes visited the department in spring 2004 while on sabbatical leave from the National University of Ireland. Peter Binev, Mark Hoffmann, Borislav Karaivanov, and John Lane will all be returning in the fall for one more year. In addition, Fengyan Li (Ph.D., Computational Math, Brown University, May 2004) and Bunyamin Sari (Ph.D., Analysis, University of Alberta, May 2003) will join the department as postdoctoral researchers for the academic year. Joining the department as a visiting professor for the fall 2004 semester is Gyula Katona. Dr. Katona is from the Alfred Rényi Institute of Mathematics, Hungarian Academy of Sciences. Also joining the department in the fall as a clinical assistant professor is Debra Geddings.

The mathematics honorary Pi Mu Epsilon was active this year. Many members and other mathematics students attended Graduate School Information Night during the fall semester where they received valuable advice for

planning future study. Also during this semester, future mathematicians and statisticians garnered more information about the real world of work during a Career Night Seminar. The organization also sponsored an academic challenge on April 20 when students competed in the third annual Integration Bee. Winners received prizes through the generous donations of the Department of Mathematics and the USC Honors College. The math department's 19th Annual High School Math Contest is scheduled for January 29, 2005. Further information about the contest including names of winners, old exam questions and solutions can be found on our at <http://www.math.sc.edu/contest/>. The Society for Industrial and Applied Mathematics (SIAM) Board of Trustees has recently approved the University of South Carolina at Columbia SIAM Student Chapter. Details about these and other news of our department are available from our departmental WEB page at <http://www.math.sc.edu/>. (Submitted by David Sumner)

#### **University of South Carolina at Beaufort (Beaufort, SC)**

The University of South Carolina Beaufort has been accredited as a baccalaureate institution by the Southern Association of Colleges and Schools Commission on Colleges, enabling the University to offer four-year degrees. Led by mathematics professor and Chancellor Dr. Jane Upshaw, USCB will begin immediately to enroll students in six new four-year-degree programs.

The new south campus of USCB opened this fall on a 200 acre site near Hilton Head Island. The first building to open was the Hargray Building, a 55,000 square-foot multi-purpose facility that includes networked classrooms, administrative and faculty offices and student services facilities. The science and technology building, which will be completed in December, will house classrooms, faculty offices, a computer lab and science labs. A new library facility will open in the fall of 2005. The Beaufort campus will continue to serve as the north campus of USCB. The South Carolina MAA dinner will be held on the new south campus this year.

Dr. Ron Harshbarger, has published the eighth edition of his Mathematical Applications for the Management, Life, and Social Sciences with co-author James Reynolds, and a new book with Lisa Yocco, College Algebra with Applications for the Management, Life, and Social Sciences, and Mathematical Modeling with Applications for the Management, Life and Social Sciences with Yocco and Chambers. (Submitted by Ron Tuttle)

#### **University of South Carolina at Upstate (Spartanburg, SC)**

Dr. M.B. Ulmer returned to teaching mathematics this fall from having served as the acting Dean of the College of Arts and Sciences. Dr. Jimmie D. Gilbert retired spring semester 2004 and Dr. Celia L. Adair retired at the end of June. Dr. Edwin F. Wilde, Distinguished Professor Emeritus, got married in September. Professors Jimmie and Linda Gilbert published two mathematics textbooks: Linear Algebra and Matrix Theory, 2nd ed, and Elements of Modern Algebra, 6th ed, both with Brooks/Cole. Dr. Kelly Waters and Dr. Bernard Omolo joined the mathematics faculty as Assistant Professors this fall.



# GEORGIA



Georgia Tech offers Ph.D. programs in Mathematics, in Algorithms, Combinatorics and Optimization (ACO), and in Bioinformatics, and M.S. programs in Applied Mathematics, in Statistics, and in Quantitative and Computational Finance (QCF).

**Research:** The School of Mathematics has strong research efforts in algebra and number theory, discrete mathematics, dynamical systems, functional analysis, geometry and topology, mathematical physics, numerical analysis, ordinary and partial differential equations, probability and statistics, and wavelets.

The Center for Dynamical Systems and Non-linear Studies is associated with the School.



Presidential Fellowships currently provide an additional stipend of \$5,500 per year and are renewable for four years. The Goizueta Fellowships, for Hispanic Americans, provide an additional stipend of \$4000 and are renewable annually.

**NSF VIGRE traineeships:** These five-year traineeships have a 12 month stipend of \$23,100, with a total of 30 months of non-teaching support and a discretionary fund of \$1000. VIGRE recipients are also eligible for Presidential Fellowships.

**Information:** Call (404) 894-5366, or visit our website at [www.math.gatech.edu](http://www.math.gatech.edu), or send an email to: [grad-coordinator@math.gatech.edu](mailto:grad-coordinator@math.gatech.edu). Write: Graduate Coordinator, School of Mathematics, Georgia Institute of Technology, Atlanta, Georgia 30332-0160.

# TECH TECH TECH

Dr. Waters was a non-tenured track faculty member at USC Upstate during the 2003-2004 academic year. Kelly received his Ph.D. from Clemson University the summer of 2003. His thesis included the analysis and implementation of a parallel algorithm for solving a set of PDE's called the modified Stokes Problem, which he used to solve flow problems involving up to 1.2 million unknowns on 256 processors. His areas of interest include: Operations research, Graph and Network Algorithms, Artificial Neural Networks, Object Oriented Programming, Parallel Computation, Computational/Numerical Analysis. Dr. Omolo received his BS degree in mathematics from Egerton University, Kenya, in 1990 and his MS degree in mathematics with a concentration in statistics from Egerton University in 1994. He worked as a Lecturer at Egerton University, for five years, primarily teaching undergraduate courses in statistics, before joining the graduate school at Texas Tech University. He received his Ph.D. in mathematics and statistics in August 2004 from Texas Tech University. His research interest is in nonparametric statistics. (Submitted by Charles Stavely)

#### **University of the South (Sewanee, TN)**

Robin Rotman, who minored in mathematics, became Sewanee's 24<sup>th</sup> Rhodes Scholar this spring. She is now studying geology at Oxford University. A mathematics minor, Will Copeland, was valedictorian of the class of '04. Will is now at Ohio State University studying economics. Ross Sowell, a junior majoring in computer science, is a recipient of a Goldwater Scholarship.

Our department is happy to welcome Stephen Carl, who has accepted a tenure-track appointment. Stephen, an alumnus of Rice, is working on his Ph.D. degree in computer science at Wright State University.

At the MAA's annual meeting last year Doug Drinen was co-organizer of a popular section on "Mathematics and Sports" that attracted the attention of the news media. Doug will help organize a similar session at this year's meeting. Mac Priestley's article "Plato and Analysis," an excursion into philosophy, is slated to appear in the *Mathematical Intelligencer*. Fred Croom's book, *Principles of Topology*, has just been re-issued in paperback by Thomson Learning. Springer-Verlag has recently published a new edition of Clay Ross's differential equations text, which uses *Mathematica*. Springer's *Undergraduate Texts in Mathematics* series now includes books by three Sewanee authors.

In April, Michael Reed of Duke University gave last year's Ebey Lecture, speaking on mathematical biology. This year the Ebey lecture was held in September, when Selwyn Hollis of Armstrong Atlantic State University discussed differential equations and their use in modeling biological phenomena. A book written by Hollis had been the focus of a faculty seminar led by Chris Parrish. The annual Homecoming Lecture this year will be given by David Rose, class of '01, who has completed his master's degree in mathematics at the University of Illinois. David will talk about cryptography.

Laurence Alvarez, class of '59, will be retiring at the end of this year. After earning his doctorate at Yale, Laurence returned to teach mathematics in

1964. He has since served the college well in several administrative capacities including Associate Provost, and he recently completed a term as Chair of the department. We shall miss him greatly. (Submitted by William Priestley)

**The University of Tennessee at Martin** (Martin, TN)

Deane Arganbright has accepted a position as Visiting Professor of Mathematics at the Korea Advanced Institute of Science and Technology in Daejeon, Korea. He had served as our department chair for the past three years. Tom Eskew is acting department chair while a national search is conducted to fill the position. Chris Caldwell, Tom Eskew, and Brenda Lackey were recognized as outstanding members of the faculty as a part of the continuing performance review process. The department welcomed three new faculty members in the fall of 2004: John Holliday, Ph.D. from Auburn, in graph theory; Sara Holliday, Ph.D. from Auburn, in graph theory; Mickey Dunlap, Ph.D. from Texas A & M, in statistics.

The department will host a Math Counts contest February 5, a middle school mathematics contest on April 5, and the Tennessee Mathematics Teachers' Association High School Mathematics Contest on April 19, 2005. (Submitted by Bill Austin)

**The University of West Alabama** (Livingston, AL)

Mr. Frank Rogers is a valuable addition to our department. Professor Rogers is in the process of completing his Ph.D. at the University of Alabama. As a graduate of the University of West Alabama, he understands the needs of our students and serves as a role model for them. The department of mathematics will be hosting its annual Mathematics Tournament at UWA in January, 2005. Also, Ms. Hazel Truelove is coordinating the involvement of the mathematics department with the Science Olympiad to be held at the UWA campus in February, 2005.

Dr. Thomas Ratkovich has been active in research in the area of group theory and is completing a joint paper with Dr. Jon Corson at the University of Alabama. Dr. Tom Gonzalez and Dr. Ratkovich will attend the 2005 Zassenhaus Group Theory Conference to be held at Auburn University at Montgomery in March. (Submitted by Thomas Ratkovich)

**Vanderbilt University** (Nashville, TN)

The Fall Southeastern Section Meeting of the American Mathematical Society was held at Vanderbilt University, October 16-17, 2004. Approximately 300 mathematicians from 37 states and 21 countries attended. A highlight was Peter Hilton's talk, on October 15, about code-breaking with Alan Turing during World War II.

During May 9-20, 2005, Vanderbilt will have its Third Annual Spring Institute on Noncommutative Geometry and Operator Algebras. More information about these and other events can be found through the department's website, at <http://www.math.vanderbilt.edu/>. (Submitted by Eric Schechter)

**Wake Forest University (Winston-Salem, NC)**

Last year Elmer Hayashi and John Baxley retired from the Mathematics Department, and this fall two new faculty members have joined the department: Sarah Raynor, whose research interest is PDE's, and Gregory Warrington, a combinatorist. Sarah did her undergraduate work at Yale, her Ph.D. at MIT, and postdoctoral work at the Field's Institute in Canada. Greg did his undergraduate work at Princeton, his Ph.D. at Harvard, and postdoctoral work at the University of Massachusetts and the University of Pennsylvania. Stephen Robinson became chair of the department July 1, 2004, succeeding Richard Carmichael, who had been chair for sixteen years. Hugh Howards won three teaching awards last year: the Reid-Doyle Prize for Excellence in Teaching given by the university, the "Teacher of the Year" determined by Student Government, and one of ten teaching awards given by the Panhellenic Council. This year's Gentry Lecturer is Professor Gene H. Golub from Stanford University, who will deliver his Gentry Lectures in March 2005. The Wake Forest Mathematics Contests (in Algebra I, Algebra II, and Geometry) will take place Saturday, April 16, 2005 at Wake Forest. (Submitted by Ellen Kirkman)

**Wofford College (Spartanburg, SC)**

Richard Robinson retired at the end of the 2003-2004 academic year after a distinguished 38 year career, including 31 years as chairman of the mathematics department. He presented a delightfully funny talk entitled "Chicken Nuggets, Diophantine Equations, and Residue Classes" as the third presentation in the Guy Jacobsohn Memorial Mathematics Colloquium Series for spring 2004.

This fall we welcomed our new colleague, Matthew Cathey, who is currently completing his Ph.D. degree at the University of Tennessee at Knoxville. He introduced us to his area of interest via a talk about "Conformal Mappings, MRIs, and the Most Flexible Owl in the World: An Introduction to Circle Packing"; this presentation was the second of three presentations in the Fall 2004 Guy Jacobsohn Memorial Mathematics Colloquium Series. Charlotte Knotts-Zides was tenured and promoted to associate professor. She presented a paper entitled "Determining the Best Seat in a Movie Theater" at a Contributed Paper Session on Mathematical Modeling Modules and Materials at the 2004 Mathfest in Providence, Rhode Island.

Three of our math majors participated in exciting summer internships. Two students worked at the Jet Propulsion Lab in Pasadena, California; Rebecca Hughes worked with the Information Management Team, helping to create an online repository for the Mars Exploration Rover Project, and David Harmon had a NASA/JPL 2004 Space Grant Internship working to develop software for the Mars Exploration Rover Project. Another math major, Christine Savvakis, worked as an Information Systems Co-op at Honeywell Aerospace in Greer, South Carolina, digitizing their safety audits. (Submitted by Charlotte Knotts-Zides)