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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.

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Advertising Manager: Same as editor.

Section Calendar

January 7-10, 2004	MAA/AMS Annual Meeting, Phoenix, AZ
February 20, 2004	Alabama State Dinner, Judson College, Marian, AL
March 6, 2004	Georgia State Dinner, Armstrong Atlantic University, Savannah, GA
March 26-27, 2004	Southeastern Section MAA, Clarksville, TN
April 21-24, 2004	NCTM Annual Meeting, Philadelphia, PA
August 12-14, 2004	MathFest, Providence, RI
November 18-21, 2004	AMATYC Annual Meeting, Orlando, FL
January 5-8, 2005	MAA/AMS Annual Meeting, Atlanta, GA
March 11-12, 2005	Southeastern Section MAA, Raleigh, NC
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
April 26-29, 2006	NCTM Annual Meeting, Kansas City, MO
November 2-5, 2006	AMATYC Annual Meeting, Cincinnati, OH
January 2, 2007	MAA-AMS Annual Meeting, New Orleans, LA
March 21-24, 2007	NCTM Annual Meeting, Atlanta, GA
November 15-18, 2007	AMATYC Annual Meeting, New Orleans, LA
January 4, 2008	MAA-AMS Annual Meeting, San Diego, CA
April 9-12, 2008	NCTM Annual Meeting, Salt Lake City, UT
January 5, 2009	MAA-AMS Annual Meeting, Washington, DC



From the Chair

With fall we welcome another year of mathematical activity in the southeast. Classes are once again in full swing and students are coming out of their summer hibernation. Some, however, were busy with summer internships, REUs, and other mathematical pursuits. In Charlotte, we celebrated the dual accomplishments of local high school phenom,

Anders Kaseorg. Anders represented the USA on our teams at the International Mathematical Olympiad (IMO) in Japan, and at the International Olympiad in Informatics (IOI) in Wisconsin. He brought home a gold medal from the IMO and a silver medal from the IOI---quite a summer of accomplishment!

The Section web page, www.maa.org/southeastern, has a new home at Elon University (NC). Sid Stubbs started our web presence in 1995, developing and hosting the section's web page at Huntingdon College (AL). We are grateful for Sid's long service as webmaster, a tenure that also included stints as Program Chair and as local arrangements chair for the section meeting at Huntingdon. We are pleased that Elon's Jeffrey Clark, a former State Director, has agreed to succeed Sid as webmaster. Jeff invites us to share ideas for making the site more useful.

Your State Directors are each planning a dinner meeting in February or March, the eighth year the section has sponsored state dinners. These have been great venues to share a meal and conversation with colleagues in your region, leavened with an illuminating after-dinner mathematical talk. Watch for the announcement of a state dinner in your state and take advantage of the opportunity to introduce your students to a broader mathematical community.

Look for the announcement of the 2004 Southeastern Section annual meeting to be held at Austin Peay State University in Clarksville, TN, March 26-27, in this newsletter. Jim Vandergriff and his team at APSU are planning a warm welcome for us. Our section's Project NExT-SE will inaugurate a new class on Thursday evening, March 25. Then, starting with short courses on Friday morning through a plenary and the Math Jeopardy finals after lunch on Saturday, the meeting at APSU promises to be another outstanding section event. Our roster of plenary speakers is again outstanding: 2003 Teaching Award recipient, Sue Goodman, Section Lecturer Jeff Knisley, Math Horizons co-editor Art Benjamin, and Monthly editor Bruce Palka. Art Benjamin will also entertain us at the Friday banquet.

One of the strengths of our meetings in recent years has been the high level of participation by undergraduate students. At our joint meeting with SIAM-

SEAS at Clemson University last spring, our SIAM colleagues introduced an undergraduate Math Jeopardy competition to the section. It was such a success that we are stealing the idea for our 2004 meeting, as well. We are once again indebted to Michael Berry from UT-Knoxville for reprising his role as master of ceremonies and for volunteering his organizational and technical skills.

At last spring's meeting, SIAMSEAS organized judging and presented awards for the top undergraduate paper and poster presentations and for the Math Jeopardy competition. Your Executive Committee would like to extend this brief tradition. For this we need your support on two fronts: time and money. We will need judges to assist in selecting the best papers and posters, and we need contributions towards a prize fund to recognize the fine efforts of these students. If you would like to join our team of judges, send a note to our Governor, Ben Klein (beklein@davidsen.edu). To make a donation toward a student prize fund, or to support other student activities in the section, write a check to the MAA and send it to our Secretary-Treasurer, Martha Abell.

Stephen Davis

Mathematics, Assistant Professor. Belmont University invites applications for a tenure-track position in mathematics, beginning August 2004. Appointment will be at the assistant professor level. Ph.D. required by time of appointment. Preference will be given to candidates who can strengthen the undergraduate program through excellent teaching, a broad background in theoretical mathematics, and experience with undergraduate research. Normal duties include twelve hours undergraduate teaching per semester, as well as other departmental and university professional responsibilities. As teaching in the university's general education program encompasses an important part of the position's duties, special attention will be given to candidates with cross-disciplinary collaborative and innovative teaching experiences and/or interests.

Send a letter of application, curriculum vita, statement of teaching philosophy, evidence of teaching ability, and the names of at least three professional references to: **Mary Goodloe (goodloem@mail.belmont.edu), Department of Mathematics and Computer Science, Belmont University, 1900 Belmont Boulevard, Nashville, TN 37212-3757.** Candidates are asked to respond in writing to Belmont's mission, vision, and values statements, articulating how the candidate's knowledge, experience, and beliefs have prepared her/him to function in support of the statements. (These statements are found, for example, at: <http://www.belmont.edu/visitors/mission.cfm>.) Applications received after December 1, 2003 will not be guaranteed consideration. (No e-mail applications please.) We will have representatives attending the Joint Meeting in Phoenix, January 7-10, 2004.

A comprehensive, coeducational university located in Nashville, TN, Belmont is a student-centered, teaching university focusing on academic excellence. The university is dedicated to providing students from diverse backgrounds an academically challenging education in a Christian community and is affiliated with the Tennessee Baptist Convention. For more information about Belmont University, please visit www.belmont.edu. *Belmont is an EOE/AA employer under all applicable civil rights laws. Women and minorities are encouraged to apply.*



From the Governor

I need to begin this report by thanking my colleagues in the Southeastern Section for electing me to the Board of Governors of the Mathematical Association of America. It is a privilege to represent the Section, in which I have spent nearly all of my professional life and in which I have so many good friends.

I also need to thank my predecessor as governor, Theresa Early, for the valuable advice she has already given me about the workings of the Board of Governors, as well as for all the good advice I will get from her in the future. We in the Southeastern Section and the national MAA should be thankful that Theresa will continue to be active at the national level. She is currently a member of the Committee on Sections, and is probably active in several other capacities of which I am not aware.

My work as a Governor has already begun. I attended my first meeting of the Board of Governors this summer (more about this later) and have been appointed to two committees: the Investment Committee (chaired by none other than our own John Kenelly) and the program committee for the 2005 Annual Joint Meeting in Atlanta. Neither of these committees has met yet, but I am looking forward to learning more about the finances of the MAA. I am also looking forward to helping put together the program for the Atlanta meeting. You can count on receiving multiple appeals from me in the future soliciting names for speakers at this meeting. Indeed, you are receiving one now.

And now let me say a little about my first meeting of the Board of Governors. After an orientation session for new governors on Tuesday, the Board met all day on Wednesday, 30 July, the day before MathFest officially opened. This summer's MathFest was held in Boulder, CO, and it was a special treat to be in such a beautiful setting. The meeting was chaired by MAA President, Ron Graham, who is just as impressive as an officer of the MAA as he is as a mathematician and an expositor. Ron is ably assisted by Martha Siegel, who is the unbelievably efficient and well-organized Secretary of the MAA. Since the agenda for the meeting of the Board of Governors required approximately 100 pages, it was a little surprising to me that we were able to get through the agenda in only one day. However, it turned out that many pages of the agenda were devoted to committee or officer reports that were not delivered in their entirety.

I want to highlight one report and two actions from the meeting. First, John Kenelly's Treasurer's Report was very reassuring. The national MAA's finances are in better shape than they have been in recent years. The

organization's books were examined by two auditing teams and got a passing grade from each. John also noted that the Halmos' generous gift would be used to refurbish the Carriage House at the MAA Headquarters for use as a conference center. Also, according to John, the structural shortcomings of the MAA's buildings have been identified and there is (or will be) money in hand to address these shortcomings.

Next, the Board voted to schedule MathFest 2006 for our own Knoxville, TN. With the 2005 Winter Meetings scheduled for Atlanta, the Southeastern Section will get two chances to show the national membership some Southern hospitality in the next few years.

Finally, the Board said goodbye to Woody Dudley and hello to Lowell Beineke as editor of *The College Mathematics Journal*. The Board also officially welcomed Art Benjamin and Jennifer Quinn as editors of *Math Horizons*. Jennifer was welcomed in absentia since she had just gone into the hospital to deliver her second son, who actually arrived on August 9, 2003. In closing, I want to emphasize how much I enjoyed MathFest this summer, even with an all day meeting on day one, and hope that each of you will attend MathFest 2006 in Knoxville, if not MathFest 2004 in Providence, RI and MathFest 2005 in Albuquerque, NM. **Ben Klein**

**LOOKING FOR A GREAT MATHEMATICS SPEAKER?
Invite a Southeastern Section Lecturer to your campus!**

Jeff Knisley of East Tennessee State University is the 2003-2004 Section Lecturer. He is available for the next two academic years. Contact him at knisleyj@etsu.edu. Possible talks include:

- Mathematical Biology: The Grand Tour (E*)
- Some Applications of Mathematics in Medicine (E)
- From Neurons to Neural Networks (I)
- Maybe the Best Curve Fitting Algorithm Ever! (I)
- The Mathematics of Cable Networks (I, A)
- Mathematical Models of the Neuron (A)
- A New Old Approach to Nonlinear Dynamical Systems (A)

John Baxley of Wake Forest University, the 2002-2003 Section Lecturer is still available for the 2003-2004 academic year. baxley@mthsc.wfu.edu.

***E is for Elementary:** intended for college students who are interested in math and for educated laymen in the general public. No college level training in math is assumed. **I is for Intermediate:** intended for students who have completed a year of calculus or other math at a similar level. **A is for Advanced:** intended for junior or senior math majors.

Announcing a New Class of Project NExT-SE

Project NExT (New Experiences 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. Not 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 25-26, 2004 at Austin Peay University, 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 2005.

For information and an application form, please see the NExT-SE web page.

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

Address all other inquiries to

Rob Harger
rharger@highpoint.edu



Fall Executive Committee Meeting

The meeting of the Executive Committee of the MAA Southeastern Section was held September 13-14, 2003 on the campus of Davidson College. Our Section Chair Stephen Davis opened the meeting by welcoming our new members and having the returning members introduce themselves.

Following the introductions, the Committee heard from each of the officers. Serving as our section's representative to last summer's MathFest in Boulder, Colorado, Stephen Davis reported on the Section Officer Meeting there. The topics discussed included the deadline for the Haimo Teaching Award moving to March 1 (versus February 1), the website source for speakers for section meetings, a report on MAA publications and finances, and the introduction of the new Henry L. Adler Award for Distinguished Teaching by a Beginning College or University Mathematics Faculty Member. He also suggested that all section officers subscribe to the national officers' listserv. He also led a discussion for Project NExT while at MathFest and reported that there was a strong group from our section at the meeting. Past Chair, Ray Collings, reported that he thought Sylvia Bozeman's response in the newsletter to her receiving the section's service award was nice and hopes that we have a response from each award recipient in the newsletter (even if he/she is present to accept the award at the section meeting). He also spoke about the possibility of having a short course at the spring meeting (in 2004 or 2005) on a math education-related topic based on some of his discussions at MathFest. Virginia Parks, our Vice Chair, reported that she plans to work on areas of the section meetings that will attract faculty and students from two-year institutions. She plans to focus on topics related to mathematics education. The Secretary-Treasurer, Martha Abell, reported on the section's budget and pointed out that the loss in funds this year was due to the fact that we earned money from the 2002 joint meeting with the AMS and made no money on the 2003 joint meeting with SIAM. She also discussed several other aspects of the budget and fielded questions from the committee.

Our Section Governor, Ben Klein, reported on the Board of Governor's Meeting at MathFest. He said that MAA finances at the national level are much improved; this includes the regular operating budget and the endowment. The 2006 MathFest will be held in Knoxville, TN, and will need assistance from our section for publicity and locating presiders. Future MathFest meetings will have sessions aimed at AP Calculus teachers and he thinks we should consider this (through contributed papers or short courses) at the section level. Newsletter Editor, Virginia Watson, reported that she printed 2175 copies of the newsletter in the spring at a cost of \$2396.85 (\$1.10 per booklet).

This was a slight increase over the number (2050) produced in Spring 2003. She needs the help of a Managing Editor. This person solicits ads and typically succeeds the newsletter editor. She plans to have an article in the Spring 2004 Newsletter about the various lecture series across the section. Joe Wimbish, our section Program Chair, discussed what will be required of his successor. Topics discussed included the fact that the Program Chair must be willing to work with AMS and SIAM every few years, and whether we should rethink the job description of the Program Chair. The committee then heard from the state directors who discussed the state dinners and ways to get in touch with MAA membership across each state.

The Executive Committee then heard a report from the section committees. In order to assist the Site Selection Committee, the group discussed possible sites for the Section Meeting in 2006. Next, the Executive Committee heard from Project NExT-SE, represented by Rob Harger. He says they plan to install a new class this spring. He is also creating a Project NExT -SE website. He hopes to get testimonials from current Project NExT -SE members to post on the website to encourage participation by new faculty members in our section. Joe Albree, our Section Historian, reported to the Executive Committee through a memo in which he told of some of the progress he has made. He also reported that he is struggling to create a Section Archive. Executive Committee members suggested that we find a suitable location on a college campus. Jeffrey Clark of Elon University will become the new section webmaster. He plans to work with Joe Albree so that some of our section's history will be posted on the web.

On Saturday, the Committee was joined by the section meeting organizers, Jim Vandergriff, Floyd Christian, and David Cochener, from Austin Peay State University. They led us through a discussion of the Spring Meeting to be held March 26-27, 2004 on their campus. The organizers showed where the registration, plenary sessions, contributed sessions, and other conference events would be held. On Thursday evening, March 25, the Executive Committee and Project NExT -SE will have a reception and dinner together and then meet separately. The social will take place 5:30-6:15 with the meeting starting at 7:30. These events will take place at the Riverview Inn where the organizers have reserved blocks of rooms. Depending on the availability of the presenters, there will be 4-5 short courses at the meeting. We plan to have a Math Jeopardy competition similar to last year in order to get more students involved in the meeting. We will continue to hold the T.A. Rush (with pizza lunch), the Student Poster Session, and Student Contributed Paper Sessions. There will be a Liaison's Breakfast and a Department Chair's Meeting. The three plenary talks are by the 2003 Section Teaching Award recipient, Sue Goodman, Section Lecturer, Jeff Knisley, and a speaker associated with the national MAA. After discussing the registration fees for the meeting and the details of how the meeting program would be produced, the meeting was adjourned. **Martha Abell**

Call For Nominations for the 2004 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 2004 meeting at Austin Peay University.

The Section Distinguished Service Award Committee encourages every member of the Section to submit a nomination to the committee chair for the 2004 award. Please send your nomination including a statement supporting the nomination to Bob Fray, via surface or email. [Bob Fray, Mathematics Department, Furman University, Greenville, SC 29613 or e-mail: bob.fray@furman.edu]

Nominations for the 2003 award may be carried forward for consideration for the 2004 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, 2004

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

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 Abell, Secretary-Treasurer
MAA Southeastern Section
Georgia Southern University
P O Box 8130
Statesboro, GA 30460

Alabama State Dinner

The 2004 Alabama Annual MAA dinner will be hosted on the evening of February 20, 2004, at Judson College (Marian, AL). The speaker will be Dr. Kyle Siegrist from the University of Alabama in Huntsville. Judson College will also host the 54th annual meeting of the Alabama Association of College Teachers of Mathematics on Saturday, February 21, 2004. For more information please see the AACTM website: <http://aactm.jsu.edu/>

Georgia State Dinner

Armstrong Atlantic University will host the Georgia State Dinner on Saturday, March 6, 2004. Details will be announced later.

South Carolina State Dinner

Furman University will host the State Dinner in Spring 2004. Details will be announced later.

No Child Left Behind Act Panel Discussion at Spring Meeting

There will be a panel discussion on the No Child Left Behind with: Leigh Lunsford (Univ. of Alabama in Huntsville) acting as Moderator. At this time Panelists include: Tracy Goodson-Espy (Univ. of Alabama in Huntsville), Bernie Madison (University of Arkansas) and David Stone (Georgia Southern University)

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, together 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 A number of graduate teaching assistantships are available, and they 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 to both graduate teaching and graduate research assistants. Highly qualified applicants may qualify for university fellowships, which carry an additional 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. 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)

Alan Koch is on leave during the fall semester working on the classification of monogenic Hopf algebras over discrete valuation rings with low ramification. This past summer Larry Riddle completed his four-year term as Chief Reader for the Advanced Placement Calculus program. He is looking forward to a quiet stay at home next June after 20 consecutive years of participating in the grading of the AP exams. Riddle was also the recipient of the 2003 Vulcan Materials Company Award for Excellence in Teaching presented each year at the Agnes Scott College commencement. Myrtle Lewin has been reappointed for another three year term as chair of the mathematics department. This coming spring she will teach in the First Year Seminar program, a program recently developed to introduce first-year students to advanced study at the college level. Her topic will be "From Zero to Infinity." (Submitted by Larry Riddle)

Albany State University (Albany, GA)

Dr. Zephyrinus Okonkwo, who served as Interim Chairperson of the Department of Mathematics and Computer Science was named Chairman, effective July 1, 2003. Dr. Marzine Green, Professor of Mathematics, and Mrs. Connie M. Leggett, Asst. Professor of Mathematics, will continue to serve as Institutional Coordinator and Science Academic Coordinator, respectively, of the new phase of the Louis Stokes-Florida Georgia Alliance for Minority Participation in Science, Mathematics, Engineering, Technology. The Department is also the recipient of a Title III grant, which will allow us to bring our Computer Science Program up to state-of-the-art. Several Mathematics and Computer Science majors participated in internship programs during the summer of 2003. (Submitted by Marzine Green)

Appalachian State University (Boone, NC)

The Department of Mathematical Sciences at Appalachian State University welcomes five new faculty members this year, Drs. Robin Blankenship, Katie Mawhinney, Jose Sanqui, Bob Wenta, and Vicky Williams. Dr. Blankenship is a new Ph.D. in graph theory from Louisiana State University. She is at Appalachian in a post doctoral position working with Dr. Greg Foley on teacher preparation. Drs. Mawhinney and Williams both join us from North Carolina State University. Dr. Mawhinney is a topologist and Dr. Williams is an algebraist. Dr. Sanqui is a statistician joining our department from Bowling Green State University. Dr. Wenta is a mathematics education specialist joining us from Indiana University.

Dr. Greg Foley received tenure last year. In addition, with Frank De-
mana, Bert Waits, and Dan Kennedy, he wrote a new edition of Precalculus. Dr. Foley also continued to direct the Mathematics Education Leadership Training program (www.melt.appstate.edu). Last summer this program in-



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

The *Master of Arts in Mathematics* is primarily 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 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 in 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 2004/2005 academic year. Awards range from \$4000 to \$6000 per semester. 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
<http://www.mathsci.appstate.edu/masters/>

cluded institutes in Middle Grades Mathematics, Algebra, Geometry, Precalculus, and Discrete Mathematics. Dr. Alan Arnholt is spending the year in Pamplona, Spain at the Universidad Pública de Navarra. Dr. Sarah Greenwald continues to receive national media attention for her work on "Using The Simpsons and Other Innovative Approaches to Teach Mathematics." She has appeared on NPR and several national periodicals. More information on her work can be found at simpsonmath.com.

On April 26, 2004, the department will host the Eleventh Annual North Carolina Mini Conference on Combinatorics, Graph Theory and Computing along with the department of computer science. This conference provides a forum for students to present their work and for faculty to give talks accessible to students. For more information see, www.cs.appstate.edu/~aam/Conference2004/index.html. (Submitted by Mark Ginn)

Armstrong Atlantic State University (Savannah, GA)

The Math department welcomed three new faculty this fall: Dr. Mark Budden (new Ph.D. University of Missouri), Ms. Sandra Campbell (MS Troy State), and Chris Pretz (pending Ph.D., University of Northern Colorado). They will fill the void created by the retirements of Professors John Hansen and Dick Munson, who each had over thirty years at Armstrong. This past spring Dr. Sabrina Hessinger was awarded tenure and promoted to associate professor. Dr. Hessinger was recently named a regional director of the PRISM project, Georgia's NSF funded initiative directed at pre college science and mathematics preparation. On November 1, 2003 the department will have sponsored its twentieth Middle School Math Tournament. On February 14 we will stage our twenty-sixth annual High School Math Tournament. (Submitted by Tim McMillan)

Auburn University (Auburn, AL)

The process of "recombination" of the mathematical sciences at Auburn is proceeding smoothly. The process will be completed by fall semester, 2004, when the faculty and programs of the Department of Discrete and Statistical Sciences will be folded into the Department of Mathematics. There have been many "joint" committees and joint votes already.

Several faculty from the department teamed with faculty from Discrete and Statistical Sciences and Curriculum and Teaching Secondary Education in submitting an NSF Proposal to fund "The East Alabama Partnership for the Improvement of Mathematics Education". The proposal was awarded approximately \$9,000,000 for the next 5-year period. The MATH faculty were Steve Stuckwisch (co-PI), Overtoun Jenda, Michel Smith, and Phil Zenor. Chris Rodger was the co-PI from DSSC and Gary Martin was PI and Marilyn Strutchens was co-PI from CTSE. John Painter, Superintendent of Lee County Schools, was also a co-PI. S. K. Westbrook and Joy Black, who are graduate students in both MATH and CTSE, will also be involved in the project. Information about the project can be found at <http://www.TEAM-math.net>.

Overtoun Jenda (who is the Associate Dean for Minority Programs



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 awards Fellowships and Assistantships for students seeking a Ph.D. degree. The stipend for a Board of Regents Fellowship is \$17,000 per fiscal year, generally renewable for four years. Assistantships, also available to Master's Degree students, begin at up to \$12,000 per academic year. All fellows and assistants receive a waiver of tuition and most 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, 2004. 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, LA 70504-1010

Telephone: (337) 482-5279
Email: math@louisiana.edu
Fax: (337) 482-5346
Web Page: <http://www.louisiana.edu/math>

and Special Academic Projects as well as a Math Dept faculty member) received a two-year \$700,000 grant from the National Science Foundation to support the Alabama Bridge to the Doctorate Program whose aim is to broaden participation of underrepresented minority students in graduate education in order to increase the number of such students attaining doctoral degrees in science, technology, engineering and mathematics (STEM) disciplines and entering the professoriate. A total of ten African-American students, consisting of 3 in Mathematics, 1 in Computer Science, 2 in Chemistry, and 4 in Biology, are currently participating in this program.

Our first student graduated in the new Actuarial Science Option of the undergraduate Applied Mathematics curriculum. Ms. Kerrie Hopper is now employed in the Actuarial Department at ALFA. Actuaries at Protective Life in Birmingham have been working with departmental faculty and personnel in the AU Foundation Office to set up future summer internships for students in the program.

Krystyna Kuperberg has been appointed Associate Editor of the Bulletin of the American Mathematical Society. Olav Kallenberg was appointed to the editorial board of Probability Surveys. Narendra Govil has been appointed to the editorial boards of Archives of Inequalities and Applications and the International Journal of Mathematics and Mathematical Sciences. Gary Gruenhage was appointed to the editorial board of Topology and its Applications. A. J. Meir has been appointed to the editorial boards of the SIAM Journal on Numerical Analysis and the Far East Journal of Applied Mathematics.

Gary Gruenhage gave plenary lectures at the Zoltan Balogh Memorial Topology Conference at Miami University (Oxford, OH) in November and at the Conference in Honor of A. V. Arhangelskii at CUNY Brooklyn in July. Olav Kallenberg gave the annual Lewis-Parker Lecture at the meeting of the Alabama Association of College Teachers of Mathematics in Huntsville in February. Piotr Minc gave a plenary one hour talk at the annual Spring Topology and Dynamical Systems Conference held at Texas Tech University in March. Krystyna Kuperberg was the Principal Speaker for Emmy Noether Day in Lubbock, TX, in May, as well being one of the five Plenary Lecturers at the Dynamical Systems Conference in Denton, TX, in May. Narendra Govil gave an invited hour talk at the Fourth International Meeting on Approximation held at Ubeda, Spain during June.

Andras Bezdek was named the Scharnagel Professor of Mathematics. Bezdek's book, Discrete Geometry (In Honor of W. Kuperberg's 60th Birthday), has just been released as Vol. 253 of Marcel Decker's series, Pure and Applied Mathematics. J. P. Holmes spent the summer working at the Center for Communications Research of the Institute for Defense Analyses in Princeton, NJ. Gary Gruenhage was invited by the Fields Institute at the University of Toronto to participate in a Thematic Year on Set Theory and Analysis and spent the fall there. Paul Schmidt spent six weeks during the summer as a guest scientist at the Universidad Politecnica de Madrid, Spain. Geraldo De Sousa hosted the 19th Auburn Miniconference on Harmonic Analysis in November and Jack Brown hosted the 16th Spring Miniconference on Real

**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 is committed to quality instruction and research and to the recruitment of the best possible faculty. 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
<http://www.usouthalabama.edu/mathstat/>

Analysis in Auburn in March. This series of bi-annual conferences has been going on since 1984 (NSF funded since 1986). They recently received a new NSF grant that will allow the series to continue (one mini/yr) through April, 2006. A. J. Meir and Paul Schmidt, faculty advisors of the new SIAM Student Chapter, took several students to the Southeastern Atlantic Section of SIAM Annual Meeting at Clemson University in March. Sasha Logan (chapter Co-President) won first prize in the student presentation competition. She was chosen to represent the SIAM Chapter at the 2003 SIAM Annual Meeting in Montreal in June where she gave one of the student presentations. Two of our topology students, Bradley Bailey and Michael Granado, gave talks on their research at the Summer Topology Conference in Washington, D. C. in July.

Thanks to a generous donation from Phil and Joy Bailey, a mathematics tutoring center is being established in Parker Hall. The Department hired one faculty member, Dr. Anotida Madzvamuse, who finished his Ph. D. and a 3-year post-doctoral appointment at Oxford University. He is a numerical analyst with expertise in finite-element and finite-difference methods as applied to reaction-diffusion systems in mathematical biology and ecology. Three European scholars visited in the spring: Klaudiusz Wojcik of the Jagiellonian University in Krakow, Poland, Janusz Mierczynski of Wroclaw University of Technology in Poland, and Monica Lazzo, of the University of Bari in Italy.

Two students finished their Ph.Ds during the year. They are: Marcin Kulczycki (at Jagiellonian Univ, Krakow, Poland) and Aprillya Rosidian Lanz (at Columbus State Univ., GA). Strashimir Popvasselev, who finished his Ph.D. a year ago and stayed on at Auburn this past year, is now at the Univ. of Louisiana at Lafayette. (Submitted by Jack Brown)

Augusta State University (Augusta, GA)

Augusta State University will hold its 30th Annual Math Contest on March 12, 2004. For information, contact Dr. Sankar Sethuraman at (706)-667-4480. (Submitted by Gerald Thompson)

Austin Peay State University (Clarksville, TN)

Mary Lou Witherspoon was promoted to Professor and Jim Vandergriff was granted tenure.

APSU was a host site for the Middle Tennessee Region of the 47th 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, rewarding and encouraging young students to study mathematics. Three APSU students (Roberto Sisneros, John Leo, and Erick Gordon) presented papers at the ACM Mid-Southeast Chapter Conference in Gatlinburg, TN with John Leo and Erick Gordon receiving 2nd and 3rd place respectively in the Undergraduate Paper Competition. We are very active at APSU with Computer Science adding two new concentrations (DataBase Administration and Internet and Web Technology). We have also split Mathematics and Computer Science into separate departments with Leon McQueen chair



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 (pending continuation of the grant) for US citizens and permanent residents and provide support for up to three years of the five-year PhD program. The VIGRE stipend is \$21,000 per year, including summer. Most other students admitted into the graduate program receive teaching assistantships; for the 2003-2004 academic year, these assistantships pay \$12,616 – \$13,452. 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 for additional information, or write to:

Professor Joe Fu, Graduate Coordinator, Department of Mathematics
University of Georgia, Athens, GA 30602 (706-542-2211, fu@math.uga.edu)

of Mathematics and Bruce Myers chair of Computer Science. We are very excited about hosting the 83rd Southeastern Section Conference and hope to see all of you in Clarksville on March 26-27. (Submitted by Jim Vandergriff)

Belmont University (Nashville, TN)

New mathematics faculty members are Andy Miller, Keeley Hutchison and Kay Geving. Stephen Campbell will be on sabbatical during the Spring 2004 semester. He plans to look for connections between matroid theory and well-covered graphs. Mary Goodloe will become the department chair when Stephen Campbell begins his sabbatical in January. Andy Miller has been accepted into the Project NExT program and began the program at the August Mathfest meeting.

The Department of Mathematics and Computer Science is continuing a Mathematics Seminar for faculty and undergraduates who are working on research projects and is also continuing its Mathematical Musings & Munchings monthly presentation series. Under the leadership of Glenn Acree, the department has begun hosting "Conversations" with area high school mathematics teachers. We are looking for ways to connect with high school teachers in meaningful ways for all involved. One fruit of this effort was a Discrete Mathematics workshop presented by Bill Hooper and an area high school teacher at the Tennessee Mathematics Teachers Association meeting in Memphis, September 2003. (Submitted by Mike Pinter)

Brevard College (Brevard, NC)

Since we last reported, we have graduated six B.A. mathematicians and expect to graduate four more this year. Two of our graduates have completed master's degree programs; two more will do so this fall; one is in preparation to be an actuary; and one is employed as a web programming and design specialist. We have had colloquia presented by Rob Harger of High Point University, Martin Jones of the College of Charleston, Gabriel Negrea of Zalau, Romania, and alumnus Isaac Bradley, of the UNC Graduate School of Business. Reciprocating, Clarke Wellborn has presented colloquia at High Point and the College of Charleston. For the fifth straight year, Brevard College has fielded successful participant teams in the COMAP modeling competition (MCM). The college is well into the design phase of an education program, led by Dr. Patricia Clow. Among the first components will be certification in mathematics education. Sue Kavli has left our teaching staff to become the college's IT director. Our offices have moved from the basement of the library to the upper floor of the college's administration building. (Submitted by Clarke Wellborn)

Caldwell Community College & Technical Institute (Hudson, NC)

Ms. Stacy Reagan is a new instructor on our Watauga Campus (Boone, North Carolina). Stacy was previously employed at Roane State Community College in Tennessee. She holds undergraduate and graduate degrees from Tennessee Technological University. (Submitted by Mike Bradshaw)

The Citadel (Charleston, SC)

John Moore returns to the department as Head. He graduated from The Citadel in 1970, served as a faculty member in the department from 1976 to 1982 (receiving tenure in 1980), and spent 21 years working in a computer-related industry. His predecessor as department Head, Charles Cleaver, will teach in the fall, be on sabbatical in the spring and then retire. The department has a new assistant professor in Computer Science, George Rudolph. George received a Ph.D. in Computer Science from Brigham Young University in 1995, and worked for Motorola as a software engineer and architect. Les Cohn has will be on sabbatical in the spring 2004. Hughes Hoyle is preparing some middle school students supplied by the Gear Up program at The Citadel for the 2003 FLL challenge. Tom Trotter, a 1965 alumnus and currently chair of the mathematics department at Georgia Tech, will return to give a talk to cadets during homecoming festivities. (Submitted by Dave Trautman)

Clayton College & State University (Morrow, GA)

The department has merged with another unit to form a new college, the College of Informational and Mathematical Sciences, CIMS, at CCSU. Dr. Catherine Aust was selected as Dean of the newly formed college, CIMS. We are pleased to welcome Dr. Anthony Giovannitti from West Georgia University as our new department head. Dr. Giovannitti holds a Ph.D. in Mathematics from New Mexico State University. The entire department is hard at work developing a new degree program for the department. Dr. Giovannitti presented "Proper Classes of Short Exact Sequences of Modules over Arbitrary Integral Domains" at the IXth Blue-Gray Conference on Algebra, University of Connecticut, Storrs, CT, in April. We also welcome Dr. Weihu "William" Hong from Southern Polytechnic State University to our family. Dr. Hong holds a Ph.D. in Mathematics from the University of South Carolina. Dr. Linda Nash serves as the Inaugural President of the CCSU Women's Forum whose purpose is to promote and enhance the professional, educational, and cultural position of women at the University. Dr. Nash holds a Ph.D. in Mathematics Education from Georgia State University and has been inaugurated into Delta Kappa Gamma. Dr. Nash and Mr. Nathan Borchelt are both serving on the Program Committee for the Georgia Math Conference. Ms. Mary Hudachek-Buswell was promoted to assistant professor of mathematics. She holds a M.S. in Applied Mathematics from Auburn University and is presenting at ICTCM and GCTM in October. Last fall, Dr. Catherine Matos attended the AMS-MER Workshop on Excellence in Undergraduate Mathematics: Diversification of Upper-Level Mathematics Programs. (Submitted by Mary Hudachek-Buswell)

Coastal Carolina University (Conway, SC)

We have two new tenure track assistant professors, Menassie Ephrem and Andrew Incognito. We expect to hire one or two more next year, so keep us in mind! Olcay Akman is on leave at the College of Charleston for 2003-2004. Deborah Vrooman has been appointed Associate Dean for the College

of Science but will still be teaching for us. On Friday, March 26, 2004, we will be sponsoring the twenty-fifth annual Math Contest together with Verizon and Coastal Educational Foundation. The deadline for applications is Friday, February 20, 2004. More information and the online application forms can be reached from the department's website via Math Lab. We are experimenting with a one-semester Precalculus course for the first time mainly to save time for students majoring in mathematics and the sciences, and especially those in the joint engineering program with Clemson University. Haven't heard about the engineering program? Check it out at www.coastal.edu/dual. (Submitted by Fusun Akman)

Columbus State University (Columbus, GA)

Richard Gibson retired and also passed away this year. Kitt Lumley and Albert VanCleave retired. New faculty include Carlos Almada, Cindy Henning and Lea Lanz. We will be searching for a retiree's replacement to begin in Fall 2004. The new department chair is Tim Howard. (Submitted by Tim Howard)

Davidson College (Davidson, NC)

Tim Chartier is the newest member of our Mathematics faculty. Tim joins us from a post-doc position at the University of Washington in Seattle. Before that, he received his Ph.D. from the University of Colorado at Boulder. Rich Neidinger has taken the reins from Stephen Davis as Department Chair. Stephen and Irl Bivens are both on sabbatical this fall. Our student awards last spring went to Frank Chemotti, who is currently studying abroad in Budapest, and to Rob McLean, who also tied for first place in undergraduate papers at the joint MAA-SIAM Southeastern Section meeting last March. Ed Scheinerman of Johns Hopkins University was our Bernard Society lecturer. He gave an engaging talk about mathematics through games. More information can be found about our department in the Bernard Review, http://www.davidson.edu/math/frontpage/bernard_review.htm. (Submitted by Donna Molinek)

Duke University (Durham, NC)

David A. Smith retired after forty years of service at Duke University. He is author or coauthor of 17 books and 104 papers and was a series editor for *Conduit*, an associate editor of the *College Math Journal* and the *Journal of Computers in Mathematics and Science Teaching*, and software review editor for *UME Trends*. He is currently the editor of *The Journal of Online Mathematics and its Applications* (www.joma.org). Among the awards and honors he has received are the MAA Carl B. Allendoerfer Award for Expository Writing and the EDUCOM Medal. Smith continues to be active in retirement. In addition to editing JOMA, he is co-director of the Duke Connected Curriculum Project and is working with Professor Lang Moore on an NSF-funded project to create online interactive textbooks in undergraduate mathematics. Assistant professor Thomas Witelski has been given a NSF CAREER award, the most prestigious award for new faculty members.

THE UNIVERSITY OF TENNESSEE, KNOXVILLE

The University of Tennessee, Knoxville offers Master's and Ph.D. programs in pure and applied mathematics and invites applications for graduate student teaching and non-teaching positions for the 2004-2005 academic year.

SPECIAL AWARDS: The department offers Science Alliance Associateships and Dryzer Teaching Fellowships to outstanding candidates. Stipends for these range between \$12,326 and \$18,000 and in some cases offer a reduction in teaching duties.

STANDARD TEACHING APPOINTMENTS: *They are the Graduate Teaching Assistantship for students with fewer than 18 hours of graduate credit in mathematics and the Graduate Teaching Associateship for more advanced students. Stipends for 2003-2004 range from \$12,572 - \$14057 and may be increased for 2004-2005. The teaching load for each of these positions is 5 contact hours/week (on average) during each of two semesters. Tuition and maintenance fees will be remitted for both semesters and the subsequent summer term. As Ph.D. students with teaching associateships progress through the qualifying examinations, they receive both teaching reductions and an increase in the basic stipend. Assistantships also include health insurance at no charge to the student.*

GENERAL INFORMATION: *Applicants for financial aid will be considered for all available awards. Recipients will continue to receive at least a standard assistantship after the initial award ends as long as satisfactory academic progress and teaching performance are maintained.*

For further information about the department and application forms, contact Assistantship Committee, Department of Mathematics, University of Tennessee, Knoxville, Tennessee 37996-1300, e-mail: gradprogram@math.utk.edu or use a browser and view our web site at www.math.utk.edu.

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The team of David Arthur, Oaz Nir and Melanie Wood finished third for the second year in a row in the W.L. Putnam competition held December 7, 2002. For her ranking among the top five of the 33249 participants, Wood was named Putnam Fellow. She is currently enrolled in the Mathematical Tripos part III at Cambridge University and plans to enter the math Ph.D. program at Princeton University next year. Senior David Arthur was awarded \$50,000 for his first place finish in the 2003 Sun Microsystems and TopCoder Collegiate Challenge held last April. (Submitted by David Kraines)

East Carolina State University (Greenville, NC)

Our new tenure-track statistician is Panagiota Kitsanta. The new full time lecturers are Alycia Aucoin, Jennifer Mayo, and Ron Williams. (Submitted by Chris Jantzen)

East Tennessee State University (Johnson City, TN)

The past year has been a busy time for the math dept. at ETSU. Beginning in the Spring of 2003, we began teaching our elementary statistics course in an NSF-funded statistics laboratory (NSF-DUE 0126682). We also hosted a 1-day workshop called ARCOTS (Appalachian Regional Conference on the Teaches of Statistics) to share with and learn from others who are doing similar things with their statistics courses.

A large group of students and faculty attended the Joint Meetings in Baltimore, with two students giving presentations. The student chapter also traveled to Clemson for the Spring Southeast Regional MAA meeting, where it sponsored a team that competed in the Math Jeopardy contest. (Submitted by Jeff Knisley)

Elon University (Elon, NC)

The senior member of our department, Bill Barbee, retired this past spring after teaching at Elon for 33 years. We celebrated Bill' s achievements and contributions to the department at a retirement party on May 3. We have hired two new faculty members, Ellen Mir and Janet Mays. Ellen comes to us from the University of Kansas, where she received her doctorate in May. Janet has taught for Elon before and comes to us from Guilford Technical Community College. Todd Lee was awarded tenure and promoted to Associate Professor. On March 21-22, eight of our majors presented papers at the Southeastern Section' s annual meeting at Clemson University. (Submitted by Jeff Clark)

Francis Marion University (Florence, SC)

Dr. Bill Whitmire received tenure and promotion to Associate Professor. Dr. Richard West received tenure and promotion to Associate Professor. Jane Gower received promotion to Assistant Professor. Dr. William Richardson received tenure.

An Information Technology grant from the S.C. Commission of Higher Education was awarded to the Department. The department built two networked computer labs with 20-24 computers in each lab. The labs are used

for teaching with technology and for students use. Six faculty attended and presented at the 15th International Conference on Technology in Collegiate Mathematics (ICTCM) in Orlando in October 2002 and will have their papers published in the 15th Annual Proceedings. Dr. Fox and Dr. West presented eight talks at the Joint Mathematics Meetings in Baltimore in January 2003. Six faculty and five students attended and presented at the MAA-SE Conference in Clemson in the Spring 2003. Six faculty and students attended and presented at the 5th Carolina's Mathematics Conference in October 2002 in Charlotte, NC. Three faculty members were leaders for this year's Educational Testing Service's Advanced Placement Program in Calculus.

We hosted the annual Pee Dee Mathematics Contest on April 24 lead by Dr. Schnibben. And we hosted a practice AP calculus test in early May lead by Dr. Allen. Dr. Allen received a state grant to run an AP Calculus Institute at Francis Marion University again this summer. Dr. Fox served as associate contest director for the Mathematical Contest in Modeling contest for 2003 and served as the contest director for the International High School Mathematical Contest in Modeling. Several additional ILAPS (Interdisciplinary Lively Applications Projects) were published in 2002-2003 by several departmental faculty. One was in conjunction with faculty from Georgia College and State University. (Submitted by Tom Fitzkee)

Furman University (Greenville, SC)

We are happy to have Artur Gorka teaching with us this year. Art is a Ph.D. candidate at nearby Clemson University. Mark Woodard spent the last academic year in Barbados at the University of the West Indies. He was partially supported by a Fulbright Fellowship. Doug Rall was an invited speaker at the Tenth Work-shop on Graph Theory in Karpacz, Poland. He spoke on domination and independence in graph products. Lindsey Mecca, a senior mathematics major, is spending the fall in Budapest, participating in the well respected Semester in Budapest program.

The spring of 2004 will be a busy one for us. Furman will host the MAA SC State Dinner and an undergraduate mathematics research conference (partially supported by a grant from the MAA). On Saturday, March 13 we will host the annual Wylie Mathematics Tournament for high school students. And on April 1, Jeffrey Weeks will be our 2003-04 Clanton Visiting Mathematician. Stay tuned for details. (Submitted by John Harris)

Gainesville College (Gainesville, GA)

Dr. Danny Lau has returned as our new division chair. The 10th Annual Math tournament will be held on April 3, 2004. Please see <http://www.gc.peachnet.edu/math/tournament/> for more details. (Submitted by Gina Reed)

Georgia College & State University (Milledgeville, GA)

Dr. Lila F. Roberts is the new chair this year. Dr. Roberts comes from Georgia Southern University. Our department is in the process of forming a student MAA chapter, to be sponsored by Dr. Laurie Edler. We hope to see

MAA-SE Short Course Registration Form

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

<http://www.apsu.edu/sesmaa>

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.

____ A First Real Course in Mathematical Modeling

____ Introduction to Public Key Cryptography

____ Making Assessment Work for Students and Faculty

____ MAA Workshop on Mathematics for Business Decisions

____ Initial steps toward preparing to teach mathematics for prospective elementary school teachers

Short Courses

A First Real Course in Mathematical Modeling by William P. Fox, Francis Marion University

In this short course, we will present our view of mathematical modeling – a creative art and a process. We will present mathematical modeling as a process and give several views of similar processes. We will present some real world modeling activities that were gathered from the community and how to build upon projects/activities. We will also hand out a short list of scenario titles to stimulate interest in the process of mathematical modeling. Finally, we will discuss some techniques of mathematical modeling and give the attendees an opportunity to experience mathematical modeling.

Introduction to Public Key Cryptography by Jeffrey Ehme and Colm Mulcahy, Spelman College

This workshop will survey some of the standard public key cryptosystems, such as Diffie-Hellman and RSA, which have changed the face of cryptography in the past 25 years. We'll discuss key concepts in confidential message transmission such as user authentication and digital signatures as well as non-repudiation issues. The mathematics used naturally leads to primality testing and the construction of large primes (e.g., with 200 digits). We also discuss modern applications of elliptic curves to cryptography. The intended audience is interested mathematicians (and students) who are novices in this area. We've found this makes great material for undergraduate research.

Making Assessment Work for Students and Faculty by Bernard L. Madison, SAUM Project Director, University of Arkansas and Scott Smith, Director of Academic Assessment, Columbia College

This mini-course on assessment will focus on how assessment can be designed and carried out to improve courses, curricula, and student learning. The session is sponsored by the NSF-funded MAA project Supporting Assessment in Undergraduate Mathematics (SAUM). See <http://www.maa.org/SAUM>. The mini-course will have three components:

- 1) Discussion of assessment and assessment methods, including particular attention to assessment of learning in the mathematics major;

- Initial steps toward preparing to teach mathematics for prospective elementary school teachers by *Gregory D. Foley, Distinguished Professor of Math Ed, Appalachian State University*

Reservations for one of these courses should be made by completing the top half of the enclosed form and returning it with a \$25 non-refundable fee by March 1, 2004 (\$30 after March 1 and on-site registration) to Martha L. Abell, MAA/SE Secretary/Treasurer, P.O. Box 8093, Georgia Southern University, Statesboro, GA, 30460, Martha@gasou.edu, 912-681-0367. Enrollment in each course may be limited. Admission to any course without reservation is on a space-available basis. A printable version of the registration form is available on the conference website at www.apsu.edu/sesmaa/shortCourse.htm. Short Course descriptions will be available by clicking on the title of the course at the website www.apsu.edu/sesmaa.

T.A. RUSH

T.A. Rush provides an opportunity for students to meet with representatives of graduate programs. If your institution wishes to participate and to be listed in the program as a part of T.A. Rush, notify Dave Cochener, Austin Peay State University, Phone: (931) 221-7804, email: cochenerdj@apsu.edu by January 31, 2004. This event is scheduled for 11:15-12:45 on Friday in conjunction with a pizza lunch for students. There is a \$25 fee for each participating graduate institution.

SOCIAL EVENTS:

Refreshments will be available during breaks throughout the meeting.

Cocktail hour will be at the Courtyard of Archwood after the awards presentation Friday evening. After the cocktail hour, dinner, featuring herb baked chicken and roast beef au jus, will be held at the Joe Morgan University Center. Musical entertainment and Dr. Arthur Benjamin's amazing and entertaining Mathemagics show will round out the evening. Additional restaurants in the Austin Peay area are listed at <http://www.apsu.edu/sesmaa/restaurants.htm>

PREREGISTRATION, ON-SITE REGISTRATION AND PROGRAM:

The fee structure is:

- \$25 Registration fee for faculty (\$30 after March 1)
- \$10 Registration fee for students and emeritus faculty
- \$15 Registration fee for high school teachers (high school students may attend at no cost)
- \$15 Friday evening dinner (optional)



Southeastern Section MAA

March 26-27, 2004
Austin Peay State University
Clarksville, TN



MEETING ANNOUNCEMENT:

The eighty-third annual meeting of the Southeastern Section of the Mathematical Association of America will be held on Friday afternoon, March 26 and Saturday morning, March 27, 2004. The Association invites all interested persons to attend this meeting and requests the assistance of all department chairs, faculty, and members of the Section in providing publicity. Both pre-registration and on-site registration will be available for all MAA members, entitling everyone who is registered to attend all talks Friday and Saturday, with the exception of Friday morning short courses for which there is a separate pre-registration.

PLENARY SPEAKERS:

- Jeff Knisley, East Tennessee State University, Section Lecturer
- Sue Goodman, University of North Carolina, Southeastern Section MAA 2003 Distinguished Teaching Award
- Arthur Benjamin, Co-Editor *Math Horizons* (as of January, 2004), Harvey Mudd College
- Bruce Palka, Editor, *American Mathematical Monthly*, University of Texas at Austin

CALL FOR CONTRIBUTED PAPERS AND SPECIAL SESSIONS:

Both research and expository papers in the areas of mathematics, (pure, industrial and applied), the teaching of mathematics, and mathematics education are solicited for the program. Titles and abstracts should be sent to Joe Wimbish, (1862 Pine Tree Drive, Edgewater FL, 32141, or jwimbish@huntingdon.edu or jwimbish@cfl.rr.com) and must be received no later than **January 31, 2004**. Please indicate the general mathematical area of the paper on the abstract. For contributed papers, twenty minutes total are allowed for the presentation of each paper. Contributed paper sessions for presentations by students, graduate or undergraduate, will be specially designated as well. Please indicate if it is a student paper.

Anyone interested in organizing a special session on a specific topic should send a title and description of the special session, by January 13th, to Joe Wimbish or Leigh Lunsford (Dept of Mathematical Sciences, U of Alabama at Huntsville, Huntsville, AL, 35899, or lunsfol@email.uah.edu).

POSTER SESSION ON UNDERGRADUATE RESEARCH:

This session features results of research by undergraduate students. Students are encouraged to present their research from academic-year work or from summer research projects. Students will be expected to be available for one hour at the poster session to discuss their research with interested persons. When submitting the abstract electronically, indicate the general mathematical area of the

\$ 8 Saturday boxed lunch (optional)

The meeting will have a full program. The program will be available around February 15th at the meeting web site. Most of the sessions will be held in Sundquist Science Complex (found on the campus map at <http://www.apsu.edu/map/index.htm>).

HOTEL INFORMATION:

Participants should make their own arrangements directly with a hotel of their choice. Blocks of rooms have been reserved (until March 1st) at the three properties listed below for the nights specified. Please cite the group name **MAA Math Conference** when making a reservation. Accommodations have varying cancellation or early checkout penalties; be sure to ask details when making your reservation. The MAA is not responsible for rate changes or for the quality of the accommodations.

HOTELS with BLOCKED ROOMS for the CONFERENCE:

Riverview Inn (100 rooms blocked Thursday night and Friday night, \$64/night with breakfast, ½ mile from APSU, 931-552-3331.)

Marriott Fairfield Inn and Suites (35 rooms blocked on Thursday night and 45 rooms blocked on Friday night, \$60/night with semi-breakfast, 6 miles from APSU, 931-551-3200.). **Red Roof Inn** (25 rooms blocked on Thursday night and 75 rooms blocked on Friday night, \$49/night, 6 miles from APSU, 931-905-1555.). There are numerous other hotels 6 to 7 miles from APSU. These include Holiday Inn (931-648-4848), Best Western Inn (931-552-2255, Shoney's Inn (931-552-8060), Comfort Inn North (931-647-6144), Ramada Inn Limited (931-552-0098), and Days Inn North (931-552-1155). Additional motels can be found at http://clarksville.tn.us/info-html/where_to_stay_4.html

TRANSPORTATION:

APSU is located approximately 50 miles northwest of the Nashville International Airport (BNA). BNA services most major airlines (<http://www.flynashville.com/>)

DIRECTIONS: Directions may be found at the meeting website. A map of APSU is at <http://www.apsu.edu/map/map.PDF> and one of Clarksville at <http://www.apsu.edu/map/city.PDF>

UPDATES

Meeting updates can be found at the website www.apsu.edu/sesmaa

- 2) Case studies of assessment programs, including examples of assessment programs in the Southeastern Section; and
- 3) Mini-workshop on designing an assessment program.

Participants with or without experience in assessment are invited. Those with experience will be given opportunities to explain their programs and how they are working. Any person working with an assessment program in the Southeastern Section is invited to contact Bernie Madison at bmadison@uark.edu about providing a brief report on the program for this session.

MAA Workshop on Mathematics for Business Decisions by Julie Tarr and Gregory Hartman, University of Arizona

After five years of development, and testing by thousands of students, the Mathematical Association of America has published the electronic texts *Mathematics for Business Decisions, Parts 1 and 2*. These are distributed as boxed software, with installation CD's and Student Notebooks. Jointly written by a mathematician and a professor of finance, these e-texts feature four interdisciplinary, multimedia projects for lower division students in business and public administration. The two course sequence, including probability, simulation, calculus, and optimization, is designed to replace the traditional combination of finite mathematics and brief calculus. We will demonstrate the new materials, discuss the challenges and rewards of teaching the program, and allow plenty of time for hands-on computer experimentation with the texts. Also, see <http://business.math.arizona.edu/MBD/mbd.html>

Initial steps toward preparing to teach mathematics for prospective elementary school teachers by *Gregory D. Foley, Distinguished Professor of Mathematics Education, Appalachian State University*

The MAA is sponsoring a major project called PMET: Preparing Mathematicians to Educate Teachers. The short course will orient participants to the PMET project and to the opportunities PMET offers as well as inform participants concerning the 2001 AMS-MAA report *The Mathematical Education of Teachers*. Participants will engage in activities to raise their consciousness of the issues and challenges related to teaching mathematics to prospective elementary school teachers in a way that will strengthen their understanding of the fundamental concepts that underlie the elementary school mathematics curriculum.

Registration Form on back of this sheet

Mail this completed form with a check **payable to the MAA** in the amount of \$25.00 (non-refundable) before **March 1, 2004** (\$30 after March 1 and on-site registration) to the Secretary-Treasurer :

Martha L. Abell, Secretary-Treasurer
MAA Southeastern Section
P O Box 8093
Georgia Southern University
Statesboro, GA 30460

you in force at the Spring Regional Meeting. (Submitted by Stephen Curry)

Georgia Perimeter College, Clarkston Campus (Decatur, GA)

The new faculty member is Dr. Shimata Tshinanga. Enefiok Umana has been promoted to Associate Professor. Jackie Thornberry has been appointed Director of Learning Support at GPC. The new chairman is Dr. Margaret Ehrlich. Ray Collings just finished a 2-year term as MAA SE Section Chair and is now serving as past chair. He has been appointed to the Conference Board of Mathematical Sciences 2005 Steering Committee, has served on a peer review panel in mathematics at NSF in July, 2003 and will be serving as GPC/GSU QUE Math Cluster Coordinator. Mary Ellen Davis and Alice Pierce graded AP Calculus Exams. Virginia Parks is serving as the MAA SE Section Vice-Chair for two-year colleges

GPC finished 1st in the SE Region and 40th nationally in the AMATYC Student League Test competition for 02-03. GPC finished 2nd in the individual competition and 3rd in the team competition at the Gainesville College Mathematics Tournament on April 12, 2003. The 17th Annual Georgia Perimeter College Mathematics Conference will be February 6 - 7, at the Lawrenceville Campus.. (Submitted by Virginia Parks)

Georgia Southern University (Statesboro, GA)

The Department of Mathematics and Computer Science is now the Department of Mathematical Sciences! Computer Science left us for the new College of Information Technology on July 1. Also effective July 1 were the departures of Lila Roberts (last year's acting chair) to a new position as Department Chair at Georgia College and State University and Jimmy Solomon from Dean of the College of Science and Technology to Professor of Mathematics. Dr. Xiezhong Li is the acting Department Chair this year. We invite applications from individuals for our permanent chair position. More information can be found at www.cs.gasou.edu. Tenure was awarded to Pat Humphrey and Broderick Oluyede. We had one new hire in a tenure-track position this year - Scott Kersey (Ph.D. University of Wisconsin, Madison).

We held another successful Mathematics Tournament March 1, 2003. We had over 800 participants. There was one winner of the Arthur Sparks Award (for a perfect score on the written test) - Peter Huang from Riverside Middle School. This year's competition will be held on March 6, 2004. (Submitted by Patricia Humphrey)

Guilford College (Greensboro, NC)

Elwood Parker is recognized this semester for 35 years of service to the College. He and his wife are in London for the semester where they are leading a Guilford Abroad Program. Jonathan Hatch (Guilford class of 1990) has been hired to replace Jill Wiesner. His Ph.D. is from the University of Missouri-Rolla in Topology under W. T. Ingram. Jonathan was an R. L. Moore project NEXt Fellow in 2000. Teresa Petty has been hired part-time to teach Math for Elementary Teachers (and other lower level courses as needed).



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 2004. 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
or, the website for the College of Graduate Studies,
<http://cogs.georgiasouthern.edu>

She was a mathematics major at UNC-G and has a Doctorate of Education degree from UNC-CH. (Submitted by Rudy Gordh)

Jacksonville State University (Jacksonville, AL)

This year, the department will continue to contribute to the Alabama Statewide Mathematics Contest (which is now directed by Jac Cole of Huntingdon College) by editing and typesetting the Geometry and Algebra II with Trigonometry tests. The department will also host the Calhoun County Math Tournament, and will help administer the Alabama Science Olympiad.

David Dempsey was awarded the JSU College of Arts and Sciences "Distinguished Teaching Award" in May of 2003. Tom Leathrum has been promoted to Associate Professor effective October 2003. Jan Case contributed the talk "From Basic Stats Class to the Real World: using the media, real data, and scholarly journals to introduce students to the uses of statistics" at the January AMS-MAA Joint Meetings in Baltimore. Ed Smith presented the talk "Dangerous Excursions In 3 Dimensions" at the annual conference of the Alabama Association of College Teachers of Mathematics (AACTM) in February. Ed was also invited to speak at the Auburn University Department of Mathematics Colloquium, where he presented some of his new packing results in the talk "Packing for Frontier Life in Three Dimensional Space". (Submitted by Jeff Dodd)

Kennesaw State University (Kennesaw, GA)

Dr. Marla Bell is acting chair this year since Dr. Danny Lau returned to Gainesville College. We welcome two new faculty this year: Dr. Nicole (Nickey) Ice (Ph.D. in Math Education. from UGA) and Dr. Anda Gadidov (Ph.D. in Mathematics at Texas A and M.). Lewis VanBrackle, Sean Eller-meyer and Joshua Du were all promoted to Full Professor. Joe DeMaio was promoted to Associate Professor. Dr. Tom Thomson retired after more than 30 years service. We successfully hosted the 23rd Southeastern-Atlantic Regional Conference on Differential Equations on October 17-18, 2003. (Submitted by Virginia Watson)

King College (Bristol, Tennessee)

Assistant Professor William Linderman will be running the New York Marathon scheduled for November 3, 2003. Professor Andrew Simoson has an article on falling down a hole through the Earth, scheduled for the April 2004 issue of the Mathematics Magazine. (Submitted by Andrew Simoson)

LaGrange College (LaGrange, GA)

The college has undergone a reorganization of their academic divisions from seven down to four. Greg McClanahan, from the Department of Mathematics, was named Chair of the Division of Sciences and Mathematics. He also received the College Teaching Award last May! Kathryn DeLamar has joined the department this fall for a one-year position. A search is underway for a tenure track position. (Submitted by William and Carol Yin)

Louisburg College (Louisburg, NC)

Dr. Martha Farmer Bragg has been selected for Who' s Who Among America' s Teachers. (Submitted by Martha Farmer Bragg)

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

Dr. Nail Yamaleev was appointed as an Associate Professor, beginning July 2003. Dr. Yamaleev earned his Ph.D. from Moscow Institute of Physics and Technology, specializing in computational mathematics and modeling. Mr. Richard Noble was appointed a Visiting Lecturer, beginning July 2003. Mr. Noble earned his Masters degree from the University of Wisconsin at Madison.

Dr. Robert Mers continues in his position as second vice-chairman and member of the steering committee of the North Carolina State Employees Combined Campaign at North Carolina A&T State University. Dr. Gregory Gibson is manager of the mathematics department's computer labs. This includes three labs, one for faculty, one for graduate students, and one for undergraduate students. Dr. Giles Warrack again (for summer 2003) received an ONR/ASEE Summer Faculty Research Fellowship Grant to work with Dr Roy L. Streit of the Naval Undersea Warfare Center, Newport, RI. The grant was for a 10 week period, and the time was spent working on problems involved with submarine tracking. Dr. Giles Warrack and Dr Alexandra Kurepa have been awarded a four year grant by the Office of Naval Research, entitled "Computational Methods in Probabilistic Target Tracking Problems" (\$597,743 for years 2003-2006). The grant will involve two undergraduate and four graduate students doing summer internships at the Naval Undersea Warfare Center at Newport, RI, where Dr. Warrack is collaborating with Dr. Roy L. Streit. Also Dr. Kurepa has been awarded a grant from National Science Foundation for the proposal: "Mathematical Models in Environmental Economics and Economic Dynamics" in the amount of \$99,275 for one year. The grant will enable Dr Kurepa to obtain a research leave from the University and spend a calendar year 2004 (January-December) visiting Wake Forest University and working on topics in Mathematical Economics.

Dr. Kurepa has organized a sequence of mini-conferences "Girls, Mathematics, and Careers: A Counselors Conference", Greensboro, October 31, 2002, and "Girls, Mathematics, and Careers: A Teacher/Student Conference," Greensboro, April 10, 2003. These conferences were supported by a grant from the Mathematical Association of America/Tensor Foundation entitled "The NCA&T Mathematics Department Program for School Counselors and Female Students". Once again, Dr. Kurepa was the organizer of the eighth annual Mathematics Awareness Day which took place on April 24, 2003 on the campus of North Carolina A&T State University. The program included undergraduate and graduate student presentations as well as faculty development workshops.

Dr. Shea D. Burns served as faculty coordinator for the 2003 NASA SHARP program held at North Carolina A&T State University. The NCA&T NASA SHARP, an eight week residential program, had 20 high school partici-

Masters in Mathematics

College of Charleston

The Program

Located in beautiful historic downtown Charleston, the Department of Mathematics offers a graduate program leading to the MS degree in Mathematics. Classes are offered in the late afternoon and evening and class size is kept small. Students receive personal attention and have many opportunities for working on research projects with faculty members. The program also offers a graduate certificate in statistics.

The Faculty

The department has 30 graduate faculty members, whose research interests include algebra, analysis, combinatorics, dynamical systems, geometry, logic, mathematical biology, mathematical physics, number theory, numerical analysis, probability, statistics, and topology. The department hosts a weekly colloquium, several research seminar series, and conferences.

Assistantships

Graduate assistantships carry a stipend of \$10,400 per academic year. Summer research support is available on a competitive basis. In addition, the Graduate School offers Graduate Incentive Fellowships to outstanding minority students. Assistantship duties include helping a faculty member with classes, tutoring at the College of Charleston Math Lab, or assisting in the department's computer laboratory.

Contact

Graduate Program Director, Department of Mathematics,
College of Charleston, Charleston SC 29424. Tel. (843)
953-5730. Fax (843) 953-1410. Email: calinia@cofc.edu.
WWW: <http://math.cofc.edu/>

participants representing 15 states, the District of Columbia and Puerto Rico. Members of the North Carolina A&T faculty served as mentors to NASA SHARP participants who conducted research projects in mathematics, chemistry, electrical engineering, chemical engineering, natural resources and environmental design, and computer science. Also Dr. Burns attended the 2003 Summer Conference on Topology and Its Applications held at Howard University in Washington, DC, July 9-12, 2003.

Dr. Dominic Clemence was named Merit Faculty Member of the Year in the College of Arts & Sciences for 2003. Dr. Tracey Tullie served as a panelist for "Black College and Career Fair" for the Wilmington Chapter of Jack and Jill of America. Dr. Janis M. Oldham again served as a panelist for the 2003 National Science Foundation Graduate Research Fellowship Program (GRFP). She served on the Mathematics Panel.

In April 2003 the Math department once again hosted high school students participating in the state high school math contest. NCA&TSU is a regional site. Professor Patricia Shelton coordinated the effort, since Dr. Castlerow's new administrative duties prevented him from managing the contest. Professor Shelton was assisted by the NCA&T chapter of the NCCTM, and faculty volunteers. The effort is jointly sponsored by the NCA&TSU Math Department, Pi Mu Epsilon, and GAMSEC (Greensboro Area Mathematics and Science Education Center.)

Several North Carolina A&T faculty participated in the Joint meeting of the MAA Southeastern Section with SIAM Held at Clemson University. Dr. Paramanathan Varatharajah spoke on "Light Beam Switching at the Interface of Two Non-linear Optical Media." Dr. Tullie spoke on "Pricing American Options via Monte Carlo: A Variance Reduction Technique". Professors Shelton and Oldham spoke on "Addressing the Issue of Retention of Mathematics majors: Seminar for Freshmen and New Mathematics Majors: Preliminary Report." Ms. Karen Herman, a student, presented a poster. (Submitted by Janis Oldham)

North Carolina State University (Raleigh, NC)

New hires for the 2002-2003 academic year include: Bernard Anthony Mair as Department Head and Professor, from the University of Florida (McGill University, 1983); Bojka N. Bakalov, as Assistant Professor, from the Univ. of CA-Berkeley (MIT, 2000); Helge Kristian Jenssen, as Assistant Professor, from Indiana University (Norwegian University of Science, 1998); Irina Aleksandrovna Kogan, as Assistant Professor, from Yale University (University of Minnesota, 2000); Demetrio Labate, as Assistant Professor, from Washington University (Georgia Institute of Technology, 2000); Alun Lewis Lloyd, as Associate Professor, from Institute for Advanced Study, Princeton (University of Oxford, 1996). Sharon Lubkin was promoted to Associate Professor, and Arkady Kheyfets was promoted to Professor. Michael Shearer is on sabbatical and Jesus Carlos da Mota is a Visiting Scholar.

Robert E. White published the book "Computational Mathematics: Models, Methods, and Analysis with MATLAB and MPI." Several math ma-



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 33 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. Three international journals have their editorial base at our department: *Constructive Approximation*, *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 2004. 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 \$2,000 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, **call:** 813-974-9566 or 813-974-5329, **e-mail:** ga@math.usf.edu, **write:** Graduate Admissions Director, Department of Mathematics, University of South Florida, PHY114, Tampa FL 33620-5700.

jors have achieved national recognition in national scholarship and fellowship competitions. Nathan George has been awarded a Gates Fellowship to Cambridge University and has also received an NSF Fellowship for graduate study. C. Franklin Goldsmith has received a Fulbright to study in Germany for a year and was awarded Honorable Mention for an NSF Fellowship for graduate school. Luke Cherveney also received Honorable Mention for an NSF Fellowship. Justin Brockman has been awarded a Goldwater Scholarship. (Submitted by Jeffrey S. Scroggs)

Presbyterian College (Clinton, SC)

We are pleased to announce the hiring of Assistant Professor Dr. Doug Daniel, and Associate Professor Dr. Clint Harshaw. Daniel comes to us from Wake Forest University where he served as Visiting Assistant Professor after completing his Ph.D. at the University of Tennessee, Knoxville. Harshaw arrives following 14 years at Newberry College where he served as Chair of the Department of Mathematics, Computer Science, and Physics. (Submitted by Clint Harshaw)

Spring Hill College (Mobile, AL)

Dr. Charles Cheney, chair of the department, has created a new concentration in the math degree for secondary education majors who are interested in a math major. Ms. Jeanette Monroe is pursuing a Ph.D. degree in secondary education. Dr. Daniel S. Cyphert is continuing his research interests in Minimal Time Trajectories in Vector Interactive Fields, motivated by certain navigation problems from his sailing experience. (Submitted by Dan Cyphert)

Tennessee Technological University (Cookeville, TN)

In the fall of the 2003-2004 academic year, Dr. Richard Le Borne was appointed as Associate Professor and tenured, and Mrs. Shelly Forgey was appointed as Instructor on tenure-track appointment. Dr. Annie Selden retired from her position as Professor and Ms. Charmaine McMurry was hired as secretary. Dr. Alice Mason, who joined the Tennessee Tech faculty in 1983, died on March 6 at Centennial Medical Center from complications following heart bypass surgery last November. Dr. Mason earned her Master's and Ph.D. degrees from the University of Florida.

On April 22, 2003, over 320 middle school and high school students (more than ever before) from Middle Tennessee arrived on TTU campus to participate in the 47th Annual TMTA Mathematics Contest. A local testing center was housed in the Mathematics Department while the mathematics faculty served as proctors for the contest. Mrs. Shelly Forgey, Mathematics Department, presented a workshop for attending teachers on "Geometer's Sketchpad projects for the High School Geometry Classroom" while Dr. Maggie Phelps presented a seminar on "Using NAEP and Other Released Items for Student Practice and Lesson Expansion". Results of the contest are posted at <http://math.tntech.edu/Contest/TMTA2003.html>. In 2004, the 48th Annual TMTA Mathematics Contest is tentatively planned for April 22

NC STATE UNIVERSITY

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Our web pages provide additional information on faculty/student research, departmental seminars, social events and extracurricular activities, assistantship stipends and benefit plans, fellowship opportunities, and the rich cultural, entertainment and employment resources of the surrounding Research Triangle.

Visitors to the Mathematics Department are always welcome. Faculty and students will be glad to meet with you, share their experiences and answer your questions.

On April 24, 2003, the Chairman for the Department of Mathematics, Dr. Rafal Ablamowicz, presented Mathematics Awards at the CAS Honors Night; the Stanley Dolzycki Memorial Scholarship, was awarded this year to Jim Lindsay and Lynda Buck became the first recipient of the Graduate Student Mathematics Teaching Award. The S.A. Patil Award went to Lee Cox, the R.H. Moorman Award went to Katherine Jane Fanning and the Grateful Heart Scholarship recipients this year were Natalie Grace White and Katherine Jane Fanning.

As a follow up to very successful 6th Conference on Clifford Algebras, that took place in May of 2002, two volumes edited by Dr. Rafal Ablamowicz have been recently submitted to Birkhäuser, Boston, and will appear in November-December 2003. For more information please visit the conference web page at <http://math.ntech.edu/rafal/cookeville/cookeville.html>. (Submitted by Rafal Ablamowicz)

Trevecca Nazarene University (Nashville, TN)

Dr. Sam Stueckle is on full-year half-time sabbatical this academic year. He is doing research at Vanderbilt. (Submitted by Larry Buess)

Troy State University (Troy, AL)

For detailed news, visit <http://www.troyst.edu/mathematics>. Dr. Vitaly Voloshin joined the department as an Associate Professor. He is a leading expert in the coloring of mixed hypergraphs. Mrs. Harriet Pullen won the annual Algernon Sydney Sullivan Award celebrating “nobility of character” by identifying individuals who exhibit outstanding spiritual qualities applied to daily living. Dr. Pat Rossi is now the current managing editor of the Alabama Journal of Mathematics. Dr. Sergey Belyi is on sabbatical for Fall 2003 to further his current research in realization theory. Mrs. Diane Porter has participated in the Southeast Alabama Technology (SEAL) Network by teaching in an interactive video conferencing classroom to 120 elementary teachers throughout southeast Alabama. Mrs. Tammy Jenkins has been working towards her doctorate at Auburn University and Mr. Bernard Avant is pursuing a degree in Instructional Technology. Several faculty members participated in statewide and national mathematics conferences, including the annual meetings of the MAA/AMS Joint Meeting, Mathfest, Alabama Association of College Teachers of Mathematics, the Alabama Academy of Science meeting and the Alabama Council of Teachers of Mathematics.

The Department hosts a regular mathematics and scientific seminar geared towards the students. About every week, we have a TSU faculty member, student, or local scientist give a talk on any mathematical project they are working on, or on any other mathematical curiosity. In addition, the Square Root of C Mathematics Club held its first Calculus Competition in the spring of 2003. The winner and runner-up received prizes, and were honored at an end-of-the-year awards ceremony. We plan to have the second installment of the competition this academic year. Students who met the requirements of Pi Mu Epsilon were honored at the same ceremony. Students here are routinely



U N I V E R S I T Y O F
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 2004 with academic year stipends starting at \$15,000. 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 Graduate School Fellowship and the 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

publishing their solutions to problems in the Alabama Journal of Mathematics. We also had a student give a research mathematical talk at the annual meeting of the Alabama Association of College Teachers of Mathematics. That same student won a research fellowship for the 2003-04 academic year.

For the 2003-04 academic year, we will host a mathematics conference for the entire Troy State University System. We will have a colloquium series where we bring in a speaker from Indiana University-Purdue University, as well as a career speaker from Auburn University. (Submitted by Ken Roblee)

University of Georgia (Athens, GA)

Tom Gard and Frank Lether have retired. The department welcomes new faculty members, Alexander Petukhov and Andrew Sornborger. Professor Joan Birman of Barnard College, Columbia University, gave the 9th annual Cantrell Lectures in April. The 10th annual Cantrell Lectures will be given April 12, 13, and 14, 2004, by the Fields Medallist Vaughan Jones of the University of California, Berkeley.

Over 300 high school students from Georgia, South Carolina and Alabama competed in the 2003 UGA High School Mathematical Tournament in October. Volunteers from the UGA math club did a great job to insure a successful tournament. Thirteen undergraduates from 8 different schools enjoyed participating in our REU program Summer 2003. Jason Cantarella led one group of students researching "Massively parallel computation of geometrically optimal knots." Matt Baker and Robert Rumely led a group on "Analysis on metrized graphs." Applications for the Summer 2004 REU groups will be available in December. We are in the third year of our NSF VIGRE grant. This fall there are four VIGRE research groups in the department, involving undergraduates, graduate students, postdocs, and faculty. Dave Benson, Brian Boe, and Dan Nakano's group is doing new computations in representation theory, Gordana Matic's group is developing a computer algorithm to classify contact structures, Jason Cantarella's group is working in geometric knot theory, and Cal Burgoyne and Robert Varley's group is studying quantum mechanics. (Submitted by Jennifer Peterson)

University of North Alabama (Florence, AL)

Ms. Jean Henderson, Assistant professor of Mathematics, is on leave this academic year to pursue a doctorate in Computer Science Education. Miss Janet Truitt is rejoining our faculty this semester as a tenure-track Instructor in Computer Science. She is currently pursuing a Ph.D. in Computer Science at Vanderbilt University. She has a Master of Computer Science degree from the University of Alabama, Tuscaloosa and a Bachelor of Science in Education degree from UNA. Her work experience includes graduate assistant activities at Vanderbilt University and at UA in Tuscaloosa. She has also served as an Instructor of Computer Science at UA, Tuscaloosa. Miss Truitt is primarily interested in professional development in Computer Science. She fills a vacancy in Computer Science created by Dr. Oscar Beck's retirement and Ms.



Mathematics

Florida State University

The Department of Mathematics offers the Master's and Ph.D. degrees in pure, applied, financial, and biomedical mathematics. Current areas of research activity include commutative algebra, computer algebra, algebraic geometry, complex analysis, harmonic analysis, computational acoustics, geometry, topology, high performance computing, numerical analysis, fluid dynamics, biomedical mathematics, protein geometry, knotting of DNA, conformal mapping, financial mathematics, and computer visualization.

Assistantships and fellowships are widely available to support graduate students. Current stipends range from \$12,000 to \$15,000 for 9 months, plus \$3,000 to \$4,000 for summer financial support. Assistantships include a waiver of tuition and most fees.

Tallahassee is the home of Florida's capitol and is located in beautiful northern Florida, approximately 30 miles north of the Gulf of Mexico and among towering live oak trees and rolling hills. The climate is subtropical with warm summers and pleasantly mild winters.

For more information and to apply online visit the URL www.math.fsu.edu and follow the Graduate Program link. Email questions to graduate_admissions@math.fsu.edu.

Jean Henderson's leave of absence to work toward her Computer Science Ph.D. The Department of Mathematics and Computer Science has selected Dr. Cynthia Stenger, Associate Professor of Mathematics, as the 2003-2004 Elizabeth Gaines Mann Professor of Mathematics. Since the Mann Professorship is intended to provide support for new or current research, the award includes a small stipend and a three-hour course load reduction. Dr. Stenger is a charter member of the SIGMAA on Research in Undergraduate Mathematics Education (RUME). She is currently pursuing research under the auspices of RUMEC. (Submitted by David Muse)

University of North Carolina at Asheville (Asheville, NC)

In UNCA Math Department news, Mark McClure was promoted to associate professor last year, and he is currently spending a year on sabbatical with a lectureship at Cornell University. Assistant professors Greg Boudreaux and Mark MacLean were each reappointed for a second three-year term.

In April 2003, Bill Dunham of Muhlenberg College delivered the second annual Parson's Lecture at UNCA. In his talk, entitled "Leibniz vs. Newton: Mathematicians at War," Dunham discussed the feud that erupted between these mathematical legends over credit for the invention of calculus. The 2004 Parson's Lecture will feature noted Princeton professor John Conway. The tentative date is March 18. (Submitted by Mark MacLean)

University of North Carolina at Greensboro (Greensboro, NC)

Dr. Alex Chigogidze joins the Mathematical Sciences Department as Head and Helen Barton Excellence Professor of Mathematics. His Degrees are from D. Sci. – Moscow University (1990); Ph.D. (1980), M. Sc. (1977) – Tbilisi University. His research interests are topology, abstract homotopy theory, topological algebra, and functional analysis. Dr. Suzanne Lea was promoted to Professor. Dr. Theresa Vaughan was promoted to Professor. Dr. Vinaya Kelkar changed status from part-time lecturer to visiting assistant professor. Dr. Grace Kissling is now a Staff Scientist in the Biostatistics Branch at The National Institute of Environmental Health Sciences, Research Triangle Park. Based on his work during his spring semester 2003 sabbatical, Dr. Jerry Vaughan gave three invited talks: "A Urysohn-like collectionwise separation property on ψ ", Annual Spring Topology Conference, Texas Tech University, March 20-23, 2003; "A non-Urysohn two step iteration of ψ ," presented to The Fifth Iberoamerican Conference on General Topology and its Applications, Lorca, Spain, June 10-14, 2003; "On strongly τ -pseudocompact spaces," presented to the conference in honor of the sixty-fifth birthday of A. V. Arhangel'skii, Brooklyn College, June 29-July 4, 2003. (Submitted by Linda Kilgariff)

University of North Carolina at Wilmington (Wilmington, NC)

The Department of Mathematics and Statistics of the University of North Carolina at Wilmington has hired four new faculty members. Dr. Edward Boone, Assistant Professor of Statistics, obtained his Ph.D. in Statistics

**DEPARTMENT OF MATHEMATICS
UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL**

The Department of Mathematics has 34 faculty members and 55 graduate students. The department provides close student-faculty interaction in a broad range of areas leading to master's and doctoral degrees. A distinguished faculty is active in research, both pure and applied, including the fields of algebra, classical and functional analysis, algebraic and differential geometry, ergodic theory and dynamical systems, combinatorics, algebraic topology, partial differential equations, representation theory, mathematical physics, and mathematical biology.

Recently the department has developed a strong group in applied mathematics, which currently has ten tenure track faculty. The primary focus of the applied mathematics program is applied sciences; applications currently represented include polymers and materials sciences, oceanic and atmospheric dynamics, fluid dynamics and nonlinear optics. Close ties have been established with applied sciences departments, both at UNC and at neighboring universities.

UNC is located in Chapel Hill, which is one vertex of the Research Triangle. Academic and cultural opportunities are enhanced by the proximity to Duke, North Carolina State, and the Research Triangle Park.

For additional information and on-line application forms, see our world wide web site at <http://www.math.unc.edu>. The Graduate School prefers the use of the on-line application form, however, if you must have a printed application or for additional information, contact:

Director of Graduate Studies
Department of Mathematics, CB #3250
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(email: dgs@math.unc.edu)

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from Virginia Polytechnic Institute and State University in May of 2003. He has previously worked for two years as a Forecast Analyst for Circuit City Stores. Mr. Paris Faison, Lecturer in Mathematics, obtained his MS in Mathematics from UNCW in May of 2003. Dr. Mark Lammers, Assistant Professor of Mathematics, received his Ph.D. in Mathematics from the U. of Missouri in 1997. He has previously held visiting positions at UNCW and U. of South Carolina, and a tenure-track position at Western Washington University. Dr. Nolan McMurray, Assistant Professor of Mathematics, received his Ph.D. in Mathematics from the U. of Mississippi in May of 2003. He has previously worked for five years as a mathematics teacher in the public schools.

Two mathematics faculty retired at the end of the Spring semester of 2003, both having served the department and university for 24 years: Dr. William L. Etheridge, Assistant Professor of Mathematics, and Dr. Sandra McLaurin, Professor of Mathematics.

An interdisciplinary team of faculty from the College of Arts and Sciences, including Drs. Russell Herman and Gabriel Lugo of the Mathematics and Statistics Department, has received notification of approval of a two-year \$425,000 NSF grant to study the integration and sustainability of the iLumina Digital Library within UNCW's Randall Library. iLumina (located at <http://www.ilumina-dlib.org>) is one of 18 featured collections which comprise the National Science, Technology, Engineering, and Mathematics Education Digital Library or NSDL (<http://www.nsdlib.org>) and contains over 1600 resources in science and mathematics.

Dr. David A. Rolls received a grant to attend the theme program "Network Modeling for the Internet" in the fall semester at the Statistical and Applied Mathematical Sciences Institute (SAMSI) in Research Triangle Park, North Carolina. Through SAMSI he will be part of a group of researchers studying modeling and statistical techniques for Internet data traffic. SAMSI is an NSF funded national institute. More information about such theme programs is available at www.samsi.info. (Submitted by Dargan Frierson)

University of South Alabama (Mobile, AL)

Our department welcomed new faculty members this year. In the Fall of the 2003-2004 academic year we have six new hires in tenure-track positions: Joerg Feldvoss (Ph.D. from University of Hamburg, 1989), Boris Kalinin (Ph.D. from Penn State University, 2000), Sherwin Kouchekian (Ph.D. from University of Tennessee, 2000), Nutan Mishra (Ph.D. from Indore University, India, 1992), Victoria Sadovskaya (Ph.D. from Penn State University, 2000), and Bin Wang (Ph.D. from Case Western Reserve University, 2003). We will be hiring two new faculty members this year. Dr. Vasily Prokhorov was tenured and promoted to Associate Professor. Dr. Gene Crossley retired from the Department after 22 years of outstanding service to our Department and University. We miss him and hope he will come back for many visits. We said good-bye to Dr. Richard Hitt, who retired after 26 productive years of service. Professor Scott Carter, after serving as interim chair for one semester, has been chosen as chair of our Department. Scott Carter has taught at the



The Department of Mathematics at the University of North Carolina at Charlotte offers programs leading to the Ph.D. degree in Applied Mathematics, the M.S. degree in Mathematics with concentrations in General Mathematics, Applied Mathematics, and Applied Statistics, and the M.A. degree in Mathematics Education. Areas of study in the Ph.D. program include, but are not limited to, *Algebra, Analysis, Computational Fluid Dynamics and Electromagnetics, Dynamical Systems, Numerical Methods, Partial Differential Equations and Mathematical Physics, Probability, Statistics, Stochastic Processes, and Topology*. In support of these programs, the Department has a strong research faculty of international stature.

For 2003-2004, assistantship stipends are set at \$10,200 for Master' s students and \$12,500\$15,300 for Ph.D. students. Especially gifted students may receive additional fellowship or grant support. Applications are accepted and considered as long as positions remain unfilled, but an application before January 15 is encouraged.

The University has an enrollment of over 18,000 and continued steady growth is expected. The metropolitan area of Charlotte is rapidly growing in terms of economic opportunity and cultural attractions that reflect a large and ethnically diverse multinational community of over 1.2 million people. For further information and applications, contact Joel Avrin, Graduate Coordinator, Department of Mathematics, University of North Carolina at Charlotte, Charlotte, North Carolina 28223, (704) 687-4929; jdavrin@email.uncc.edu. URL: www.math.uncc.edu.

University of South Alabama since 1989, and we are delighted to have him as chair.

Dr. Carter published articles with his collaborators in the Michigan Journal of Mathematics, the AMS Contemporary Math Series, the Journal of Knot theory and its Ramifications, and the Transactions of AMS. Scott hosted an AMS Special Session in Orlando. He received an NSF grant for collaborative research with Masahico Saito at South Florida. Drs. Richard Hitt and Xin-Min Zhang published an article in Linear Algebra and its Application. Professor Xin-Min Zhang is currently on sabbatical leave in China. Dr. Boris Kalinin transferred the NSF grant "Rigidity Phenomena for Higher Rank Abelian Actions" from The University of Michigan. Professor Satya Mishra hosted two workshops in Allahabad, India. Dr. Mishra published an article in the American Journal of Mathematical and Management Sciences. Professor Madhuri Mulekar published a Marcel-Decker book chapter. She published articles in the American Journal of Hematology and the Teaching Statistics. Madhuri has been actively involved in various grant activities. She received an ASSDA grant and has three grants pending. Dr. Cornelius Pillen and his collaborators have been busy publishing articles in the Transaction of the AMS, Journal of Algebra, and Advances in Math. Dr. Prokhorov published articles in the Journal of Approximation Theory and the Journal of Computational Analysis and Applications. Drs. Scott Carter, Vasily Prokhorov and Cornelius Pillen received a grant from the Alabama Space Grant Consortium to support the Mobile Mathematics Circle. Professor Al Rainosek secured a \$147,000 grant from the Alabama Center for Estuarine Studies. He traveled to Tokyo last summer to serve as the head of the U.S. delegation to Subcommittee 5: Acceptance Sampling. Drs. Dan Silver and Susan Williams jointly published articles in Topology, L' Enseignement Mathe' matique, the Journal of the London Math Society, and the Journal of Knot theory and its Ramifications. Dan and Susan secured \$254,000 of new NSF funding for their project "Applications of Symbolic and Algebraic Dynamics to Knot Theory". Dan co-organized the Geometric Topology section of the Southeastern Topology and Dynamics Conference that was hosted in Lubbock. Professor Mike Windham has published in the Journal of Classification.

Eight undergraduate math/stat majors received scholarships of \$1500 each. We have 40 undergraduate math/stat majors of whom we are very proud. (Submitted by Vasily Prokhorov)

University of South Carolina (Columbia, SC)

Our Putnam team ranked 63rd nationally. Matt Elder, a freshman, placed 92nd in the nation and Eric Mueller and Jonathan Mason placed in the top 500.

Dr. Marguerite Hedberg, Associate Professor Emeritus, died at the age of 95 last August. Her will provided for the establishment of the Wyman Loren Williams and Ernest Albert and Marguerite Zeigel Hedberg Chair in Mathematics. This endowment provides the department the opportunity to hire an outstanding senior mathematician. For their generous gift and service to the

University, the College of Science and Mathematics and the Department of Mathematics has named LeConte 311 as the Ernest Albert Hedberg and Marguerite Zeigel Hedberg Student Lounge.

There are two Goldwater scholars on campus this year; one, Katie Spurrier, is a mathematics major and in her second year as a Goldwater scholar. Last year, two of USC's four Goldwater nominees were math majors; one, Jae Jun Kim, was named to the Honorable Mention list. In 2002-3 there were a total of 30 graduates with a B.S. in Mathematics. Katie Spurrier and Jonathan Mason were named Outstanding Students in Mathematics. Brandi Bower was named Outstanding Student in Mathematics Education. Jule Emery received the CoSM Senior Year Mathematics Scholarship. Pi Mu Epsilon was very active last year sponsoring two contests for undergraduates - an Integration Bee and the "Not Too Scary Math Contest." Both events were well attended and quite successful. Also with some support from Pi Mu Epsilon, the Math and Statistics Departments again co-hosted Career Night. At this event alumni are invited back to tell about what their jobs are like and how their undergraduate studies helped them in their current jobs.

The department's Eighteenth Annual High School Math Contest is scheduled for February 7, 2004. At last year's contest, USC welcomed 183 students from 28 high schools. The written portion of the contest was won by Ted Dickel a senior at D. W. Daniel High School, in second place was Tripp Jones a senior at the Governor's School for Science and Math, and third was Sebastian Zhang, a sophomore at Southside High School. All three received scholarship support to attend USC. Further information about the contest including names of winners, old exam questions and solutions can be found on our contest website <http://www.math.sc.edu/contest/>.

We have two new faculty members joining us this year, Adella Vraciu from Romania received her Ph. D. from the University of Michigan, and Gang Yu from China, received his Ph.D. from the University of Georgia. Visitors to the department and/or IMI are Wolfgang Dahmen, Lenny Jones, Pawel Béchler, Dominique Picard, Albert Cohen, Sergei Konyagin, and Lutz Weiss. Postdocs are Peter Binev, Mark Hoffman, Boris Karaivanov, and John Lane. On leave for the fall semester is Michael Filaseta. Paul Sperry retired from the department in December after many years of service. His frequent volunteering for departmental activities will be sorely missed.

Ed Dickey has been named Chair of the Department of Instruction and Teacher Education in the College of Education. He has also served as Program Chair for the NCTM Southern Regional Conference, 6-8 November 2003, Charleston, SC. Jerry Griggs is now Editor-in-Chief of the SIAM Journal on Discrete Mathematics. Peter Nyikos was a Visiting Professor at the Alfred Rényi Mathematical Institute of the Hungarian Academy of Sciences.

Fan Chung Graham, the Akamai Professor of Internet Mathematics at the University of California, San Diego, will be the I.M.I. Distinguished Lecturer for the fall. Her talk, "Can you hear the shape of a network?" will be presented on October 29 at 4:00 PM in LeConte 412. For more information on IMI activities go to www.math.sc.edu/~IMI.

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)

Akira Iwasa, a Ph.D. from the mathematics department of the University of South Carolina Columbia, has joined the mathematics department as an assistant professor. Ron Harshbarger has just published the seventh edition of his *Mathematical Applications For the Management, Life, and Social Sciences* with James Reynolds of Clarion University of Pennsylvania. The transition from a regional campus to a four-year bachelor degree granting institution continues and we expect to award out first bachelors degrees this spring. Jane Upshaw, professor of mathematics and chancellor of USCB, led the groundbreaking this summer for our new campus located between Hilton Head Island and Beaufort. Chancellor Upshaw expects to open the new campus in August of 2004. (Submitted by Ron Tuttle)

University of South Carolina at Spartanburg (Spartanburg, SC)

USCS welcomed two new members to the mathematics faculty this fall. Dr. Michael Hudak has taught at several universities in Ohio, Minnesota, and Alabama prior to joining the faculty at USCS. He is the recipient of awards for teaching excellence and service. His research interest include all foundational topics, with an emphasis on model construction using forcing techniques. Dr. Kelly Waters received his Ph.D. this summer from Clemson University. 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 area of interest include: Operations research, Graph and Network Algorithms, Artificial Neural Networks, Object Oriented Programming, Parallel Computation, Computational/Numerical Analysis, Fluid flows, High Dimensional Data Visualization, and Video/Image Analysis. USCS mourns the loss of Professor Guy Jacobsohn, who unexpectedly died this spring. The Spartanburg Mathematics Colloquium Series was renamed the Guy Jacobsohn Memorial Colloquium Series. Professor Celia Adair, the Chair of the Division of Mathematics and Computer Science, has announced that she plans to retire at the end of the spring semester 2004. (Submitted by Charles Stavely)

University of the South (Sewanee, TN)

Clay Shonkwiler, a mathematics major, was salutatorian of the class of 2003 and is now enrolled in the graduate school of mathematics at the University of Pennsylvania. Clay joined members of our department this past spring in reviving an old tradition of holding an informal seminar on a topic of common interest. We took turns lecturing on chapters from Sheldon M. Ross' s new textbook, "Probability Models for Computer Science." Last April, a number of former mathematics and computer science students returned to Sewanee

**MISSISSIPPI STATE UNIVERSITY
GRADUATE PROGRAMS IN MATHEMATICS AND STATISTICS**

Programs: The Department of Mathematics and Statistics offers Master' s degrees in Mathematics and Statistics, and the Ph.D. degree in Mathematical Sciences. The doctoral program is designed to ensure that the student acquires knowledge in a broad spectrum of the mathematical sciences, in addition to expertise in a chosen field of concentration. Active areas of research include applied and computational mathematics, ordinary and partial differential equations, functional analysis and operator theory, topology, graph theory, functional equations, and statistics. The degree program for the M.S. in Mathematics is flexible enough to allow the student to prepare for employment or further graduate study. The M.S. in Statistics program is a blend of statistical theory and statistical methods, which provides the student with excellent training for professional employment in government or industry. Students in this program obtain sufficient theoretical background to qualify to teach elementary statistics or to enter a doctoral program in statistics.

Financial Support: Graduate Teaching Assistantships are available for a nine-month period with stipends of \$12,000 - \$14,000 for doctoral students and \$10,000 - \$12,000 for master' s students. There is also the possibility of summer support. All Graduate Teaching Assistants receive a full tuition waiver. Screening of applicants for Fall begins in February, while screening for Spring starts in October.

The University: Mississippi State University is a Land-Grant Institution with a Carnegie classification of Doctoral/research university-extensive and an enrollment of over 16,000, which includes more than 3,000 graduate students. The campus is located in northeast Mississippi adjacent to the city of Starkville and the Mississippi Research and Technology Park.

The Department: Currently, the Department has thirty-six faculty members, including twenty-four graduate faculty, approximately fifty undergraduate majors, and about forty full-time graduate students. The Department' s faculty is active in research and publication. Computing resources include a departmental computer laboratory, a computer classroom, and personal computers in all offices. All computers are higher-end, networked, and loaded with the latest versions of commonly used software packages in mathematics and statistics. The Department provides collaborative support for projects funded through the Engineering Research Center (ERC). Students in certain research areas may obtain access to high performance super-computers and Silicon Graphics workstations at the ERC.

Correspondence: For further information and application forms, contact: The Graduate Coordinator, Department of Mathematics and Statistics, P.O. Drawer MA, Mississippi State, MS 39762; Telephone: (662) 325-3414; Fax: (662) 325-0005;

e-mail: Office@math.msstate.edu; URL: <http://www.msstate.edu/dept/math>.

Mississippi State University does not discriminate on the basis of race, color, religion, national origin, sex, age, disability, or veteran status.

to honor Clay Ross on the occasion of his retirement from active teaching. The banquet that followed their talks was attended by some fifty persons. Since then, Clay has been invited by Springer-Verlag to prepare a new edition of his textbook on differential equations. On October 10th the annual homecoming lecture was given by Ed Gerber, class of '00, who is continuing his work in the Program in Applied and Computational Mathematics at Princeton. Ed explained how we might better understand the variability of our wintertime weather by paying attention to the "North Atlantic Oscillation" and coupling together into a single model the winter climates in North America and Europe. The title of Ed's talk was "Lions and Lambs." (Submitted by William Priestley)

The University of Tennessee at Chattanooga (Chattanooga, TN)

Betsy Darken has published a textbook, *Fundamental Mathematics for Elementary and Middle School Teachers*. The purpose of this text is to foster a more profound understanding of fundamental mathematics among future teachers. Students who have used preliminary versions at UT-Chattanooga have significantly improved their abilities to reason carefully, solve unusual problems, explain concepts, do mental arithmetic, and engage in other activities that demonstrate a deeper comprehension of elementary mathematics.

Professor Boris Belinskiy is on sabbatical in Spring, 2004. His research is in the area of Partial Differential Equations, in particular, the mathematical analysis of some important engineering models. The project is located at the intersection of Mechanics (Vibration Theory) and Mathematical Analysis (Control Theory). (Submitted by Steve Kuhn)

The University of Tennessee at Martin (Martin, TN)

Professor Daryl Kreiling retired from the faculty at the end of June. Daryl received the Associate of Education degree from Nebraska Western College, the Bachelor of Science in mathematics from Chadron State College in Nebraska, the Master of Arts and the Educational Specialist degrees from Bowling Green State University in Ohio, and the Ph. D. in mathematics from the University of Wyoming. He came to the University of Tennessee at Martin in the fall of 1980 as the Dean of the College of Arts and Sciences and Professor of Mathematics. The department wishes Daryl a happy and prosperous retirement.

Deane Arganbright was invited to present a workshop at the International Conference on Trends in Mathematics Education, ICTME, in Beirut, Lebanon. The workshop was titled "Mathematical Modeling and Visualization with Excel", and was presented in June. Professor Chris Caldwell was the recipient of a research grant from the Number Theory Foundation for work on the Prime Pages web site; www.utm.edu/research/primes/. Deane Arganbright, Bill Austin, Judy Gathers, Louis Kolitsch, Stephanie Kolitsch, Desiree' McCullough, and David Ray received grants to support their travel and professional development during the year.

The department hosted both the Tennessee Mathematics Teachers'

EMORY UNIVERSITY

DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE

The Department offers M.A. and M.S. degrees in Mathematics and in Computer Science and the Ph.D. in Mathematics. Ph.D. students may specialize in many areas including algebra, applied mathematics, computational mathematics, combinatorics, complex analysis, differential equations, differential geometry, dynamical systems, graph theory, numerical linear algebra, and topology. Ph.D. students may concurrently pursue the Computer Science M.S. degree.

Financial Aid - The Department offers aid in the form of *fellowships*, and *tuition waivers*. Awards carry a stipend of \$16,000 (Math Ph.D.) or \$12,550 (CS MS) for nine months, plus full tuition. All assistants typically grade, conduct tutorials, or serve as lab reps during their first year and mathematics assistants teach one class per semester in later years.

Completed applications must be received by February 15, 2003 (Math Ph.D's) or March 1 (CS MS).

Special Fellowships - The University also offers a number of special *Woodruff Fellowships* and *Emory Minority Fellowships*. Students with outstanding undergraduate records are urged to apply for these awards. **Apply by January 20, 2003 to be eligible for these special awards.**

For further information see our web page at www.mathcs.emory.edu or contact -

Director of Graduate Studies
Department of Mathematics and Computer Science
Emory University
Atlanta, Georgia 30322

Association High School Mathematics Contest and the Middle School-Junior High School Mathematics Contest this spring. The TMTA High School Contest consists of exams in Algebra I, Algebra II, Geometry, Precalculus, Calculus, and Statistics. A total of 215 students representing 14 schools in Northwest Tennessee participated in the contest on our campus. The Middle School-Junior High School Contest consists of separated exams for students in grades 6, 7 and 8. A total of 209 students representing 12 schools in Northwest Tennessee participated in the contest on our campus.

Deane Arganbright received the Extended Campus and Continuing Education Outstanding Achievement Award for the Spring of 2003. Chris Caldwell, Professor of Mathematics, was honored as the University Scholar for the fall semester of 2002. Brenda Lackey received the University of Tennessee National Alumni Association Award for Outstanding Teaching. This award was established by the University of Tennessee National Alumni Association. Its purpose is to recognize faculty members who have demonstrated strength in teaching and contributed to the teaching profession through extracurricular achievements, leadership, and scholarship. (Submitted by Bill Austin)

Vanderbilt University (Nashville, TN)

Alain Connes, Fields medalist, now lists Vanderbilt among the departments with whom he is affiliated. A full list of our department members, including visitors, can be found at <http://sitemason.vanderbilt.edu/site/e9dek8/contacts.html>. Mike Mihalik continues as Chair. He is now assisted by Phil Crooke, who is filling the new position of Vice Chair. Jonathan Farley has been promoted to associate professor (with tenure).

Upcoming conferences include: December '03 Computational analysis on the sphere, May '04 Noncommutative geometry and operator algebras, May '04 Approximation theory, May '04 Computational harmonic analysis, and June '04 Discrete mathematics. This year's Shanks Lecturer will be Fields medalist Steven Smale. More information about the conferences and the Shanks Lecture can be found at <http://sitemason.vanderbilt.edu/site/juP8ac/news.html>. (Submitted by Eric Schechter)

Wake Forest University (Winston-Salem, NC)

Hugh Howards was promoted to Associate Professor. He and Ken Berenhaut were named Sterge Faculty Fellows. We have new faculty: Visiting Assistant Professor, Christopher Dometrius (Ph.D. from N.C. State University) and Instructor Mary Katherine McKinnon (M.S. from Wake Forest University). Two members of our faculty are on research leaves for the fall semester of 2003: Marielba Rojas is at CERFACS in Toulouse, France, and Ken Berenhaut is at the University of Georgia. Fred Howard gave the talk, "The Probability of Consecutive Numbers in Lotto", at Coastal Carolina University on October 10, 2003. Elmer Hayashi is retiring in December 2003, after 30.5 years as a valuable member of the department. (Submitted by Ellen Kirkman)

Georgia Institute of Technology

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

Programs: The School of Mathematics has strong research efforts in discrete mathematics, dynamical systems, functional analysis, mathematical physics, numerical analysis, ordinary and partial differential equations, probability and statistics, and wavelets.

The Center for Dynamical Systems and Non-linear Studies and the Southeast Applied Analysis Center are associated with the School.

Fellowships: The School of Mathematics offers both Teaching and Research Assistantships at 12 month stipends of \$18,720 for virtually all Ph.D. students, and 9 month stipends of \$11,160 for some M.S. students. In addition, Georgia Tech offers Presidential Fellowships and Presidential Minority Fellowships to outstanding students. These currently provide an additional stipend of \$5,500 per year and are renewable for four years.

NSF VIGRE traineeships: These five-year traineeships have a 12 month stipend of \$19,800, 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) 894-9203

visit our website at <http://www.math.gatech.edu/>

or send e-mail to: grad-coordinator@math.gatech.edu.

Write:

Graduate Coordinator,
School of Mathematics,
Georgia Institute of Technology,
Atlanta, Georgia 30332-0160.

Winston Salem State University (Winston-Salem, NC)

Mrs. Pamela Moses-Snipes is a mentor teacher for public school teachers for Sigma Xi in North Carolina. She presented at the North Carolina Council of Teachers of Mathematics (NCCTM) Conference on October 10, 2003, and the title of her presentation was "Measurement and Its Cultural Beginnings." She will be co-conducting mathematics teacher workshops for Winston-Salem/Forsyth County Public School teachers on "Hands on Mathematics" and Carnegie Algebra for the SCIMAX grant. Mrs. Tracey Watkins serves as the Program Director for the GAME (Girls Accessing Mathematical Explorations) Program. She received a grant from the Tensor Foundation/Mathematical Association of America to fund the program. A proposal is being prepared to extend this program to include boys. She is co-advisor of the Mathematics Society at Winston Salem State University. Dr. Dan Wishnietsky will be conducting "Incorporating Web Sites into the Curriculum" workshops for teachers for the SCIMAX grant. He has a monograph in press "Using PDA's in the Classroom." Dr. Vincent Snipes presented at the North Carolina Council of Teachers of Mathematics (NCCTM) Conference on October 9, 2003, and the title of his presentation was "Improving College Algebra Performance Through Classroom Assessment." He will be co-conducting mathematics teacher workshops for Winston-Salem/Forsyth County Public School teachers on "Hands on Mathematics" and Carnegie Algebra for the SCIMAX grant. He is a member of the North Carolina State Mathematics Contest Committee. Dr. Udaykumar Vyas has a publication "Chronal Isomorphism, Singularities, and Black Holes" appearing in the October 2003 issue of the Journal of General Relativity and Gravitation (GRG).

Tanya Craft, a senior mathematics major, participated in a summer internship at the National Center for Atmospheric Research (NCAR) in Boulder, CO. Her research was on "Improving the Performance of Image Based Flow Visualization." Shari Brockington, a sophomore mathematics education major, received a \$2000 scholarship from the classes of the 1930s from Atkins High School. Kesha Holloway, Shari Brockington, and Latonya Chalmers attended the North Carolina Council of Teachers of Mathematics (NCCTM) Conference in Greensboro, NC October 9-10, 2003. (Submitted by Vincent Snipes)

Wofford College (Spartanburg, SC)

Lee Hagglund has been appointed chair of the department. Ted Monroe has been promoted to full professor. Richard Robinson has announced that he will be retiring at the end of the academic year. At the 2003 Mathfest in Boulder, Colorado, Charlotte Knotts-Zides presented a paper on "Launching a Single-Stage Rocket into Space" during a session on mathematical modeling. The department sponsored the second colloquium in the Guy Jacobsohn Memorial Mathematics Colloquium Series for Fall 2003; our featured speaker was mathematician and author Dr. John de Pillis of the University of California Riverside. (Submitted by Charlotte Knotts-Zides)