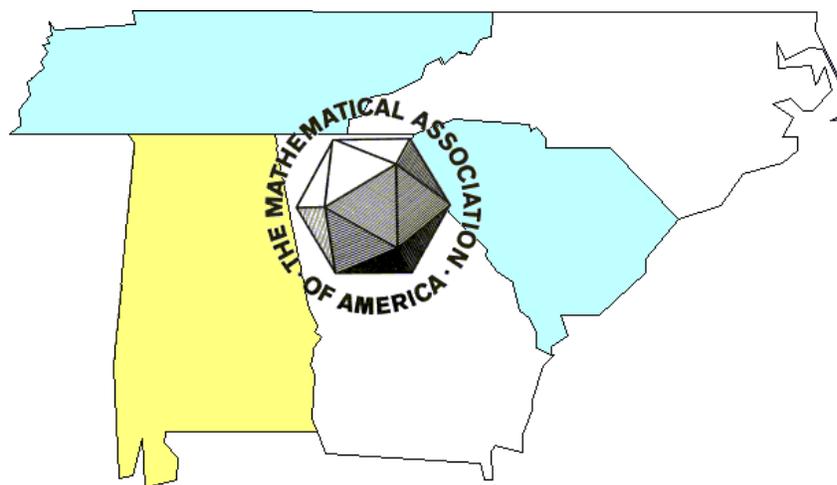


# Southeastern Section Newsletter



*Fall 2012*  
*Volume 31 Number 2*

**IMPORTANT SECTION MEETING INFORMATION**  
**WINTHROP UNIVERSITY, ROCK HILL, SC**  
**MARCH 15-16, 2013**

**Call for Papers: Deadline February 1**  
**Meeting Information: Page 28**  
**Short Course Information: Page 33**

**LOOK INSIDE!**

## TABLE OF CONTENTS

Section Calendar .....	3
From the Chair .....	5
From the Governor .....	6
Project NExT-SE Announcement.....	7
Section Lecturer Information .....	7
Fall Executive Committee Meeting Minutes .....	8
Announcements from the State Directors .....	11
News from the Southeastern Section Campuses .....	13
Call for Nominations for the Distinguished Service Award .....	26
Call for Nominations and Nomination Form for the Award for Distinguished Teaching By a Beginning Faculty Member .....	27
Call for Nominations and Nomination Form for the Distinguished Teaching Award.....	30
Meeting Information .....	32
Pullout Student Meeting Advertisement .....	33
Southeastern Section Officers and Committees.....	40

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.

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

## **SECTION CALENDAR**

November 30, 2012	Deadline for Nominations for the Section Distinguished Service Award
December 1, 2012	Deadline for Nominations for the Section Distinguished Teaching Award
December 31, 2012	Deadline for Nominations for the Section Distinguished Teaching Award for Beginning Faculty Members
January 9-12, 2013	MAA-AMS Annual Meeting, San Diego, CA
<b>February 4, 2013</b>	<b>Deadline for Abstract Submission for Session Annual Meeting</b>
February 8, 2013	Alabama State Dinner, Samford University
February 9, 2013	63 <sup>rd</sup> Annual Meeting of the Alabama Association of College Teachers of Mathematics, Birmingham-Southern College.
February 9, 2013	Georgia State Dinner and MUURMaC Undergrad Research Conference, Mercer University
February 15-16, 2013	Georgia Perimeter College 26th College Mathematics Conference
February, 2012	Valdosta State University 18th Annual Mathematics Technology Conference
<b>March 1, 2013</b>	<b>Deadline for Early Registration for Session Annual Meeting</b>
March 2, 2013	Columbus State University High School Invitational Math Tournament
March 9, 2013	Georgia Southern University Invitational Mathematics Tournament
<b>March 15-16, 2013</b>	<b>Southeastern Section Annual Meeting, Winthrop University, Rock Hill, SC</b>
April, 2013	Morehouse College 11th Annual Harriett J. Walton Symposium on Undergraduate Mathematics Research
August 1-3, 2013	Mathfest, Hartford, CT
<b>March, 2014</b>	<b>Southeastern Section Annual Meeting, Tennessee Tech University, Cookeville, TN</b>
January 15-18, 2014	MAA-AMS Annual Meeting, Baltimore, MD
August 7-9, 2014	Mathfest, Portland, OR
January 10-13, 2015	MAA-AMS Annual Meeting, San Antonio, TX
August 5-8, 2015	Mathfest, Washington, DC
January 6-9, 2016	MAA-AMS Annual Meeting, Seattle, WA
January 4-7, 2017	MAA-AMS Annual Meeting, Atlanta, GA
January 10-13, 2018	MAA-AMS Annual Meeting, San Diego, CA
January 16-19, 2019	MAA-AMS Annual Meeting, Baltimore, MD

**5<sup>th</sup> Biennial Mercer University  
Undergraduate Research in Mathematics  
Conference (MUURMaC)**

**February 9, 2013**

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

**Dr. Michael Dorff  
Associate Professor of Mathematics  
Brigham Young University**

Partial travel funding is available for those without support from their home institution.

For more information see <http://www.mercer.edu/math/muurmac/>  
or contact Dr. J. Reinkoester at [reinkoester\\_jn@mercer.edu](mailto:reinkoester_jn@mercer.edu)



## FROM THE CHAIR

There is much to be excited about in the coming year. Our Spring meeting, which will be at Winthrop University in Rock Hill, South Carolina, on **March 15-16, 2013**, promises to be very exciting. We are looking not only to continue what we have done in the past but also to build some new initiatives and events introduced at our very successful 2012 Spring meeting at Clayton State University. In addition, there are some very exciting one-time opportunities this coming year, both at our Spring meeting as well as in mathematics in general.

Much of what I learned about the upcoming year came from my trip to MathFest during the first week of August in Madison, WI. The section officers meeting took place on Thursday, August 2, at 3:30 p.m. Many topics were discussed, several of which are of great interest for to our section. In particular, there are *two* special emphases in mathematics in the year 2013 – the *Mathematics for Planet Earth* special emphasis (<http://mpe2013.org/>) and the *International Year of Statistics* (<http://statistics2013.org/>). At the respective web sites is information on how to get involved, including how to host local events and have those listed nationally and internationally.

Correspondingly, our section meeting this spring will have talks and events related to both of these themes, and in general, we in the mathematics and statistics community should take advantage of our “year in the spotlight.” Also in the spotlight at our Spring section meeting will be some new initiatives that were very successful last year and should be even better this year. The distinguished lectures for students were very popular last year and should be so again this year – one of the speakers is **Rick Gillman**, who has coauthored a book on game theory and will be giving two talks – “Evolutionary Game Theory: Why Lefties Survive” and “Global Warming and the Tragedy of the Commons.” There will also be expanded opportunities for students from across the southeast to interact both mathematically and socially. And let’s not forget the highly successful events that have been prominent for some time at our meetings – in particular, the **Math Jeopardy competition** and the **Graduate and Career fair** featuring free pizza.

In addition, the MAA itself is introducing a new emphasis to better define and promote itself. This new initiative is **Participate, Investigate, Educate (PIE)**. The MAA will be promoting this new emphasis in the coming year at both regional and national meetings. For example, there will be wristbands at the national meetings with the P, I, and E; and hopefully, there will be many who collect all three. In short, PIE is a national effort to coordinate Career (P), Research (I), and Educational (E) perspectives into a unified, highly coordinated organizational theme. The goal is for all the MAA activities at both the regional and national levels to be promoted as they relate to one of these initiatives. At the officers meeting, we spent some time brainstorming as to what PIE means at the section level.

There were several other topics discussed at the MAA officers meeting at MathFest. We learned that a **New Undergraduate Curriculum Guide** is under development. Initial meetings occurred at MathFest, but many more opportunities will occur at meetings and otherwise between now and the January 2015 report release. The Committee on Undergraduate Programs (CUPM) is seeking a lot of input, even possibly willing to attend section meetings (if logistics allow). In addition to standard math courses, the CUPM is seeking information, examples, guidance on tracks (e.g., biomath, actuarial) and other related features of the math major.

Also, at the officers meeting, the email policy for sections was clarified. Specifically, *if you are not receiving email from the MAA but do want to, then go to [www.maa.org](http://www.maa.org) and click on the blue button on the middle right marked “Join Our Email List.”* The MAA does not ever want to send unsolicited emails and thus requires all who receive email to sign up for it. Finally, there was some discussion of new online reporting initiatives, service awards, various personnel changes at the MAA itself, and the MAA electronic books initiative.

Thus, there is much to be excited about in this coming year. We are looking forward to another great meeting at

(Continued on page 9)



## **FROM THE GOVERNOR**

It is a pleasure to be back on the MAA-SE Executive Committee after rotating off about two years ago when I completed my term as Past-Chair of the Section. I am truly honored to have been elected as your Governor and will do my best over the next 3 years to be a conscientious contributor to the MAA Board of Governors. I must point out, however, that just as when I became the Section Secretary-Treasurer in 2002, I have some “big shoes” to fill in following Stephen Davis.

My introduction to the Board of Governors (or BoG as the MAA like to say), was an email over the summer stating that we would be getting access to a website for obtaining various materials for the upcoming BoG meeting in Madison. Shortly before the meeting, I was astonished to go there to find an agenda almost 200 pages in length! In view of the 2013 theme of *Mathematics and Planet Earth*, I went to the BoG with my iPad in hand instead of a notebook of printed pages, which made me feel better in terms of helping the environment in addition to making my bags a bit lighter!

Serving on the BoG is viewed as such an important task that the MAA requests that all new members attend a BoG Orientation Session the day before their first BoG Meeting. The seven other new governors and I met with the MAA Leadership Team for about 3 hours to discuss an array of topics. Most importantly, we discussed how governors can best communicate with the section. We also reviewed a great deal of information to prepare us for some of the discussion that was set to take place at the BoG meeting, including financial information and plans for a capital campaign (Second Century for the MAA). The orientation session ended with MAA President, Paul Zorn, walking us through the BoG Agenda, highlighting some areas and giving necessary background information.

The day of my first BoG meeting began with a shuttle ride from the host hotel beside Madison’s Convention Center to the location of our meeting two miles away. You probably remember the circus act when they packed clowns into a VW Bug. Well on August 1, 2012, we were able to see how many MAA BoG members we could fit into a hotel van. We likely broke all of the Wisconsin Department of Motor Vehicle policies in the process, but I believe we had at least 16 onboard! I sat beside Past MAA President David Bressoud and had a heart-to-heart (and shoulder-to-shoulder) conversation on the future of STEM majors along the way, so I had no complaints. (If you haven’t read David’s *Launchings* column at MAA Online, you should! They are interesting and informative! <http://www.maa.org/columns/launchings/launchings.html>)

There were two themes to this summer’s BoG Meeting, (1) investment in the future and (2) planning and setting priorities.

The Board reviewed numerous reports. Some of the highlights include: A record number of participants in the Putnam Exam in December 2011 (4400; Median Score – 0; Average Score – 4.3; Top 500 had a score of 13 points or more; Highest Score 91/120 points); Attendance at MathFest 2011 (Lexington) was 1400 and the lowest since 2008 (Madison). Attendance at MathFest 2012 (Madison) was anticipated to be much better.

The MAA is still sound financially with about \$13 million in assets (including buildings and pledges). However, there is concern that the MAA’s reserve is too low. Experts on non-profits recommend having about one-half to a full year’s operating budget in reserve. This would be \$5-10 million in the case of the MAA, and at this time, the MAA has \$0.56 million in reserve. Much of the discussion that took place with regard to finances paralleled that in the U.S. government, with some voices recommending that the MAA spend less and other voices recommending that the MAA invest in areas that could bring the organization more in the way of profits (on books, competitions and donations to the MAA). We will have to see what the final verdict will be. A final budget will be presented to the BoG in the fall, at which time an electronic vote will be taken. However, I will point out that the MAA Leadership is poised to attempt to focus on ways to increase revenues. There are plans to increase the participation of students in the AMC by working with marketing groups that promote STEM fields. They are also making greater efforts to have more contacts with teachers, parents and students through mail, e-mail, videos and newsletters; and

**(Continued on page 9)**

## PROJECT NEX-T-SE

Every other year the Southeastern Section of the MAA provides support for several new faculty members to become sectional fellows in Project NEX-T (New Experiences in Teaching). This organization sponsors professional development activities for faculty members, new and old, at all major MAA meetings. These activities address issues related to classroom management, assessment, textbook selection, tenure and promotion, and many other areas of professional interest.

Applications for new Sectional Project NEX-T Fellows will be solicited soon. Please contact one of the Sectional Co-directors (Patrick Bahls: [pbahls@unca.edu](mailto:pbahls@unca.edu), Karen O'Hara: [kohara@highpoint.edu](mailto:kohara@highpoint.edu), or Ron Taylor: [rtaylor@berry.edu](mailto:rtaylor@berry.edu)) to learn more about the program and the application process.

### LOOKING FOR A GREAT MATHEMATICS SPEAKER?

**Invite the Southeastern Section Lecturer to your campus!**

Many think the Section Lecturer only delivers an address at the Annual Meeting of the Section, but this person also visits individual institutions within the Section.

**Hugh Howards** is the 2012-2013 Section Lecturer. Contact him at [howards@wfu.edu](mailto:howards@wfu.edu).

**Possible Lecture Topics Include:**

- The Magic of Brunnian links
- The trouble with the Borromean Rings
- Knots vs. Graphs: An Epic Tale of Survival
- Linked spheres in higher dimensions and how it all shapes up
- The Knot Contest - a survey of some basic ideas in knot theory followed by a knot theory game show where the students are the stars
- An Introduction to Three-Manifolds Through Triangulations
- Knots that are  $n$ -adjacent to the unknot



## **FALL EXECUTIVE COMMITTEE** **MEETING MINUTES**

September 14-15, 2011  
Clayton State University  
Emily Hynds, recording

Friday, September 14

Present: Queen Harris, David Dempsey, Jeff Knisley, Catherine Matos, Emily Hynds, Jim Gleason, Jim Solazzo, Ray Collings, Andy Miller, Martha Abell, Pat Humphrey, Virginia Watson, Sarah Raynor, Kristin Abernathy, Ron Taylor

The meeting started at 7:30 pm.

Minutes from the Spring 2012 executive committee meeting were approved.

### **REPORTS:**

Most of the officer reports had been emailed to the executive committee prior to this meeting. (The reports themselves are available from the Secretary/Treasurer.) Several officers highlighted a few items that were contained in their respective reports. Other officers gave oral reports whose contents are briefly described below.

Taylor (Beginning Faculty and Project NExT-SE) opened a discussion regarding the winner of the *Southeastern Section Award for Distinguished Teaching by a Beginning College or University Mathematics Faculty Member*. He suggested that each year we nominate this winner for the national Alder award.

*Motion:* Pat Humphrey made a motion that the Beginning Faculty officer will annually nominate the winner of the section new faculty teaching award for the national Alder award. Jim Gleason seconded the motion.

The motion was approved.

Gleason (Webmaster) requested that members send him information pertaining to items that need to be added to or changed on the site.

Humphrey (Nominations) mentioned that we are in need of nominations for the Georgia State Director, the Alabama State Director, and Section Lecturer.

The committee agreed that going forward we will provide plaques for the three section award winners instead of framed certificates.

Watson (Historian) reported that progress has been made in transcribing interviews with MAA members.

### **NEW BUSINESS:**

1. Because of changing rules regarding emailing within the MAA, the section needs to have members of the executive committee who will be responsible for email requests made to the national office. These requests are for the purpose of emailing large groups of members within the sections such as all members in a particular state, all liaisons, etc.

*Motion:* Jeff Knisley made a motion that the Vice Chair for Programs and the Newsletter Editor be responsible for email requests to the national office.

**(Continued on Page 9)**

**Chair's Report (continued from page 5)**

Winthrop on **March 15-16, 2013**. There will be events in both the new and highly student friendly campus center on the *Scholars Walk* as well as a conference dinner in an architectural masterpiece. Be sure to register

**Governor's Report (continued from page 6)**

are trying to get more Department Chairs interested in hosting the competition on their campuses. They also mentioned that the AMC test will be linked to the Common Core State Standards to encourage even more schools to have students participate. (See [illustrative-mathematics.org](http://illustrative-mathematics.org) to find out more on the standards.) There are also plans to encourage faculty development activities for K-12 teachers in relation to the AMC. Another avenue to increase revenue is through the MAA's Development Office (where Christina Knowles is now the Director). The MAA will be holding a "Centennial Campaign" and will need more staff members to make the campaign successful. After the silent phase, a goal for the campaign will be announced in 2015. It was recommended that we read the book on the survival of organizations, *Race to Relevance*. Another key area in which the MAA hopes to generate revenue is through the MAA Books program. As observed by an MAA Strategic Planning Task Force, this is a potentially great source of income from non-MAA members. The MAA now uses Amazon to sell books on-line. MAA members will need a coupon code to get a discount (that will be sent in an email message). The future of Section Book Sales is still uncertain with the retirement of individuals around the country who helped to make the Section Book Sales successful and cost-effective. There was also discussion about the use of Social Media to promote MAA Books and associated materials as well as links to associated on-line courses (through large consortia).

The MAA-SE Section By-Laws were approved (with only a few questions asked). Because our by-laws changes were voluntary, the Section will be revisiting them for our mandatory review in a few years. (The Chair of the Committee on Sections highlighted our submission as a good example of explaining how and why the changes were being made.) Apparently, some sections still have the chair of the section also serving as the program coordinator, and this is the main item reviewed and discouraged by the BoG. Of course, in the MAA-SE, we don't have this problem in our by-Laws (or else we could never get anyone to agree to serve as Chair)!

Another major item of discussion revolved around whether or not implicit bias could be making an impact in the MAA in the way in which we give awards, nominate committee members, select candidates for elections,

or approve articles for publication. After a great deal of discussion at this summer's meeting (and apparently at prior BoG meetings) and with the support of several MAA Committees (including the Council on Prizes and Awards and the Committee on the Participation of Women), the BoG recommended that doubly-masked (or double-blind) review be used with all MAA publications. Under this system, neither referees nor authors are told one another's identities. As a compromise, current editors of MAA publications will phase in doubly-masked review over time. They are not expected to suddenly change the way in which they have been working with reviewers. For more information on implicit bias, you can visit the website for "Project Implicit" and take the "Gender and Science Test" to find out if you have an affinity for a certain type of bias. In my case, I found out that I have a moderate association of "Males with Science and Females with Liberal Arts" as compared to "Females with Science and Males with Liberal Arts". The AWIS-MAA Joint Task Force on Prizes and Awards prepared a document entitled "Avoiding Implicit Bias: Guidelines for MAA Selection Committees" ([http://sections.maa.org/avoiding\\_bias.pdf](http://sections.maa.org/avoiding_bias.pdf)). We can keep this in mind for use in the MAA-SE as well. After the discussion of doubly-masked reviewing, the meeting adjourned.

While I could not report every detail of the BoG Meeting and all that it entailed, I hope that I have given you a sense of the key issues facing the MAA. These are challenging times in terms of making decisions for planning for the next century for the MAA. We should also be mindful of the MAA Mission Statement: "To advance the mathematical sciences, especially at the collegiate level". We can probably all do a better job in spreading this message.

**Executive Comm. Minutes (continued from page 8)**

Queen Harris seconded the motion.

The motion was approved.

2. The second order of business was regarding the amount of money to be contributed by the section toward state dinner expenses. There was discussion among the committee members which led to the following two motions:

*Motion:* Andy Miller made a motion that the section would reimburse up to \$500 toward having the section lecturer give the lecture at a state dinner. The increased amount (from \$200) is due to the probable additional travel expenses. David Dempsey seconded the motion.

(Continued on Page 10)

The motion was approved.

*Motion:* Andy Miller made a motion that the unrestricted reimbursement for state dinner expenses be raised to \$250 from \$200. Ron Taylor seconded the motion.

The motion was approved.

3. The third order of business pertained to the section's funding of Project NExT – SE. Again, following discussion among the committee members, a motion was made.

*Motion:* Sarah Raynor made a motion that the section would reimburse expenses for Project NExT – SE not to exceed \$1000 per year. The money is mainly to be used to help new members travel to the section meeting. Pat Humphrey seconded the motion.

The motion was approved.

## DISCUSSION:

There were two additional topics of brief discussion.

- 1) Committee members discussed the possibility of eventually splitting the secretary/treasurer position into two positions.
- 2) Committee members also discussed ways in which to better involve research institutions at the section meeting.

The meeting adjourned at 9:54 pm.

## Saturday, September 15

Present: David Dempsey, Jeff Knisley, Catherine Matos, Emily Hynds, Jim Gleason, Jim Solazzo, Ray Collings, Andy Miller, Pat Humphrey, Virginia Watson, Sarah Raynor, Kristin Abernathy, Joe Rusinko, Trent Kull, Ron Taylor, Queen Harris

The meeting began at 8:30 am.

## SPRING 2013 MEETING

### General Plans

Kull (Winthrop) presented plans for the 2013 meeting.

Much of the meeting will run in a manner similar to

those in the past. The plans specific to Winthrop were well thought out and needed little change. Only two suggestions were made.

- 1) It was suggested that student posters be moved to a more central location.
- 2) It was suggested that the program be used to highlight when the food court will be open so participants will not feel the need to grab a quick meal on the way.

There was some discussion about payment methods but no decisions were made. It was left to the planners at Winthrop to work out the way that they felt would work best at their institution.

## Program

The committee agreed to keep the same basic format for the plenary speakers. Details were worked out concerning introduction duties for the two known plenary speakers.

There was discussion about who to invite as the third plenary speaker. The suggestion was made that we invite a speaker who could address the MAA 2013 focus topic of "Mathematics of Planet Earth." Some suggestions were made and the Chair will follow up with invitations.

The three proposed short courses were approved by the committee. Several special sessions were also approved.

## Discussion

The committee discussed possible speakers for the distinguished lectures for students. We also discussed ideas for getting additional involvement in the Graduate School and Career Fair.

*Motion:* Jeff Knisley made a motion that all national Project NExT fellows would automatically be Project NExT-SE fellows as well. Sarah Raynor seconded the motion.

The motion was approved.

The meeting adjourned at 11:10 am.

## STATE DIRECTOR ANNOUNCEMENTS

### From David Dempsey, State Director of Alabama

\*The annual Alabama MAA State Dinner will be held on Friday evening, **February 8, 2013**, on the campus of Samford University in Birmingham, AL. The speaker will be **Hugh Howards**, from Wake Forest University, who is this year's MAA Southeastern Section Lecturer. The title of Hugh's talk will be "**Linked Spheres in Higher Dimensions and How It All Shapes Up**," which relates to knots and their generalization to higher dimensional spheres. This promises to be an engaging after-dinner talk appropriate for a varied audience of faculty and students. More details will be sent out soon to Alabama MAA members, but members from neighboring states are also welcome. For more information, please contact the Alabama MAA State Director, David Dempsey, at [ddempsey@jsu.edu](mailto:ddempsey@jsu.edu).

The next day, Saturday, February 9, the 63<sup>rd</sup> Annual Meeting of the Alabama Association of College Teachers of Mathematics (AACTM) will be held at Birmingham-Southern College. Anne Yust will serve as the local coordinator for that event. For more information, see <http://www.ajmonline.org/AACTM/>, where the announcement and call for papers will soon be posted.

### From Catherine Matos, State Director of Georgia

There are a number of activities planned in Georgia at college and university campuses during this academic year. Here are just a few of the planned activities for this fall and coming spring:

Columbus State University: CSU will hold its annual invitational mathematics tournament for high school students Saturday, March 2, 2012. Please visit <http://math.columbusstate.edu/tournament/> for more information.

Georgia Council of Teachers of Mathematics: GCTM will hold their 53<sup>rd</sup> Annual Georgia Mathematics Conference October 17-19, 2012 at Rock Eagle. For more information, visit <http://gctm-resources.org/drupal/node/47>.

Georgia Perimeter College: GPC will hold their 26<sup>th</sup> Georgia Perimeter College Math Conference at the Clarkston Campus February 15-16, 2013. The theme of the conference this year is "Get Engaged with Math!". For more information, visit <http://www.gpc.edu/~gpcmathc/>.

Georgia Southern University: GSU will host their 25<sup>th</sup> Annual Georgia Southern Invitational Mathematics Tournament on March 9, 2013. For more information, visit <http://math.georgiasouthern.edu/math/tourny/tourny.html>.

Kennesaw State University: KSU is hosting the 2<sup>nd</sup> Annual Kennesaw Mountain Undergraduate Mathematics Conference October 19-20, 2012. For more information, visit <http://math.kennesaw.edu/conferences/KMUMC2012/participants.html>.

Morehouse College: Morehouse will host the 11<sup>th</sup> Annual Harriett J. Walton Symposium on Undergraduate Mathematics Research in April of 2013.

Valdosta State University: VSU will hold their 18<sup>th</sup> Annual Mathematics Technology Conference in February 2012.

The 2013 MAA Georgia State Dinner will be held at Mercer University in conjunction with their Undergraduate Research Conference February 9, 2013. The plenary speaker will be Dr. Michael Dorff from Brigham Young Uni-

versity. He is the director of the BYU summer mathematics REU and the director of the Center for Undergraduate Research in Mathematics (CURM). In 2010 the MAA awarded him the prestigious "Deborah and Franklin Tepper Haimo Award" for distinguished college or university teaching.

### **From Patrick Bahls, State Director of North Carolina**

We are pleased to announce that this year's MAA State Dinner for North Carolina will be hosted by Davidson College. The dinner will take place on Tuesday, December 4<sup>th</sup> at 6:00 p.m., with after-dinner speaker Professor Jane Hawkins of UNC Chapel Hill. The title of Prof. Hawkins's talk is "Coding, Symbolic Dynamics, and Automata: Efforts to Simplify the Complex World."

All math faculty and students from institutions in North and South Carolina are invited to attend; registration will open soon. The dinner will cost \$20 for faculty and \$10 for students. If you have questions, please contact Donna Molinek [domolinek@davidson.edu](mailto:domolinek@ davidson.edu).

### **From Jim Solazzo, State Director of South Carolina**

We are still looking for an institute in South Carolina to host this year's state dinner in the spring of 2013. A state dinner host may combine this event with some student activities such as student research posters or presentations. To see an example, please visit the website of last year's state dinner at Clemson:

[http://www.clemson.edu/ces/math/colloquia-research-seminars/MAA\\_dinner.html](http://www.clemson.edu/ces/math/colloquia-research-seminars/MAA_dinner.html),

The first spring Carolina Math Seminar (CMS) was held at Benedict College on February 10, 2012 and the second one was held at the University of South Carolina at Salkehatchie on April 13, 2012. For details, please visit the CMS website at: <http://www.uscsumter.edu/~florezr/seminar.html>.

### **From Andrew Miller, State Director of Tennessee**

#### **Attention TN MAA-SE Members:**

In recent years, the TN State Dinner has been lightly attended. This fall, I will be asking you to share some information so that I can help plan state dinners that meet the needs and desires of our state members. Watch your email for a link to a survey in November. Your feedback is greatly appreciated! Of course, if you have immediate comments to share, you can always email me at [andrew.miller@belmont.edu](mailto:andrew.miller@belmont.edu). In the meantime, I will be planning a state dinner for this academic year to be held sometime during the spring semester.

## NEWS FROM THE SOUTHEASTERN SECTION CAM- PUSES

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

Larry Riddle is on sabbatical for the academic year. While having officially retired, Myrtle Lewin continues to teach several courses for the department while we conduct a search this year for a full-time tenure-track replacement. Jim Wiseman has begun a three year term as department chair. Alan Koch is serving as the President of the Faculty Executive Committee during the academic year. We are very proud that Shan Shan, a junior mathematics major from Qingdao, China, will be attending both the spring 2013 Budapest Semester in Mathematics program as well as the fall 2013 Math in Moscow program. (Submitted by Larry Riddle)

### **Appalachian State University (Boone, NC)**

Appalachian State University welcomes Dr. Michael Bossé as the new Distinguished Professor of Mathematics Education. Michael has come to Appalachian after working with mathematics educators of all levels at East Carolina University, and will act as the new coordinator of the ASU MELT program (Mathematics Education Leadership Training, <http://melt.appstate.edu/>). Drs. Debbie Crocker, Katie Mawhinney, and Tracie McLemore Salinas are in the second year of the Appalachian Mathematics Partnership or AMP, providing professional development to teachers in more than 9 school districts within the region, along with colleague Dr. Kathleen Lynch-Davis from the ASU College of Education (AMP is a U.S. Department of Education funded MSP). Dr. Eric Marland along with physics colleague Brad Johnson received a NASA NC Space Grant through which they provided a five-day workshop, High Country Robotics, for interested middle and secondary teachers. And finally, we would like to congratulate our colleague Dr. Kevin Shirley, who since coming to ASU has passed the two Society of Actuaries (SOA) Fellowship exams, the SOA Design and Pricing Individual Life and Annuity exam and the SOA Company Sponsor Perspective Individual Life and Annuity exam. Kevin directs the department's Actuarial Science Degree program (<http://as.mathsci.appstate.edu/>). (Submitted by Katherine Mawhinney)

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

The leadership of the department has recently changed. The new administrative team is:

Tin-Yau Tam, Department Chair; Narendra Govil, Associate Chair and Undergraduate Program Officer; Ulrich Albecht, Graduate Program Officer; Maggie Han, Instruction Director ; and Pat Goeters, Graduate and Teaching Assistants Supervisor .

Three new faculty members Dr. Guanqun Cao (Statistics), Dr. Xiaoyu Li (Statistics) and Dr. Jessica McDonald (Discrete math) joined the department as assistant professors this Fall. Guanqun and Xiaoyu received their PhDs from Michigan State University in 2012 and Jessica received her PhD from the University of Waterloo in 2009. We also hired Dr. Ziqin Feng in topology, but agreed to postpone the start of his contract until next year so he could accept a prestigious Marie-Curie International Fellowship to work with Dr. Chris Good in the University of Birmingham, England. Ziqin got his PhD from the University of Pittsburgh in 2010 and was a visiting professor at Miami University in Ohio.

Drs. Dmitry Glotov, Maggie Han and Erkan Nane were granted tenure and promoted to associate professorship. Maggie attained the ASA designation (Associate of the Society of Actuaries). Erkan received Butz Teaching Award.

Drs. Overtoun Jenda and Pete Johnson had a very successful REU program this past summer, by the metric of publishable discoveries by the participants. One paper, co-authored by two participants, by themselves, has been submitted, and two more, each co-authored by two participants with one co-director, are very close to being ready for submission. There are 5 more papers in the works, two of them currently in preparation. This will be the first of our REU programs in which every participant will be a co-author of at least one paper, eventually.

Dr. Gary Gruenhagen has been named the Distinguished Graduate Faculty Lecturer.

Dr. Ash Abebe received the COSAM Faculty Service/Outreach Award.

Dr. Piotr Minc delivered a series of three one-hour lectures at the Workshop on Recent Advances in General Topology, Dimension Theory, Continuum Theory and Dynamical Systems held at Nipissing University, Canada, May 14-18, 2012. The workshop was sponsored by Fields Institute and the National Science Foundation.

Dr. Chris Rodger took John Asplund on an NSF-funded trip to Australia to run two math camps in the middle of the continent. Well over 100 middle school students, many of whom were aboriginal children, attended

the three-day camps in remote areas of the Northern Territory. Growing out of this annual trip is the Auburn Mathematical Puzzle Challenge, organized by the graduate students in the department. AMP'd first ran in Spring with around 50 middle school children attending from counties around Auburn. It aims at problem solving in an enjoyable setting, with answers requiring explanations! Braxton Carrigan, who came on the trip for the previous two summers, began the challenge, now John is organizing one this Fall.

Drs. Stephen Stuckwisch, Huajun Huang and Ulrich Albrecht are our department's members of a team headed by Marilyn Strutchens that received a major grant from the Alabama State Department of Education for the Alabama Math, Science, and Technology Initiative (AMSTI) Mathematics and Science Partnership. The purpose of the grant is to assist Alabama's teachers in better serving their students in the areas of Mathematics. Other members of the team are from AU-AMSTI and the Department of Curriculum and Teaching in the College of Education.

Dr. Andras Bezdek received the C. Harry Knowles Endowed Professorship for Research Leadership in Mathematics Instruction at Auburn University and started to create a Visual Math Center within the Department. He also received the COSAM outstanding Teacher Award. In the last five years Andras Bezdek has been extending his research in discrete geometry to math education, promoting teaching geometry with the use of 3D model. Together with Professor Bret Smith of the Department of Industrial and Graphic Design, they introduced and organized an interdisciplinary studio modeling course and created a permanent math exhibit placed in Parker Hall.

Dr. Narendra Govil was a member of the International Scientific Committee of the International Conference on Applied Mathematics and Approximation Theory held in Ankara, Turkey, during May 17-20, 2012. In 2012 he joined the Editorial Boards of the Journal of Complex Variables, and of the journal Pure Mathematical Sciences. Besides, he has been continuing as an Editor of the Australian Journal of Mathematical Analysis and Applications, Associate Editor of the Journal of Inequalities and Applications, and of the European Journal of Pure and Applied Mathematics, Member of the Editorial Board of the International Journal of Mathematics and Mathematical Sciences, and of the Journal of Inequalities and Special Functions.

Dr. Wenxian Shen is one of the five organizers of the IMA (Institute of Mathematics and its Applications) 2012-2013 Program on Infinite Dimensional and Stochastic Dynamical Systems and Their Applications (Sept. 1, 2012 -- June 30, 2013) and is also one of the three organizers of the IMA Annual Program Year Workshop on Lattice and Nonlocal Dynamical Systems

and Applications (Dec. 3-7, 2012). Wenxian Shen was one of two organizers at a special session at The 36th Annual SIAM Southeastern Atlantic Section Conference held at University of Alabama in Huntsville, March 24 and 25, 2012, and Georg Hetzer and Wenxian Shen were two of the three organizers of a special session at the 9th AIMS Conference on Dynamical Systems, Differential Equations, and Application held in Orlando, FL from July 1 to July 5, 2012.

Dr. Tin-Yau Tam was named Chair & Lloyd and Sandra Nix Endowed Professor. He delivered a series of lectures in Selcuk University in April and the visit was fully funded by the Scientific and Technological Research Council of Turkey (TUBITAK) and Selcuk University Research Projects Coordinator (BAP). In June he also gave a series of lectures in Inner Mongolia University, China. He then gave colloquia at Shenyang Normal University and Jilin University in July. He was invited speaker of two conferences: 7th Workshop on Matrices and Operators, Harbin Engineering University, Harbin, China, July 13-16, 2012, and the 11th Workshop on Numerical Ranges and Numerical Radii, National Sun Yat-sen University, Kaohsiung, Taiwan, July 9-12, 2012. He is on the organizing (scientific) committee of the 4th International Conference on Matrix Analysis and Applications, July 2-5, 2013, Konya, Turkey, and of the 18th ILAS meeting, Providence, July 3-7, 2013, RI, USA.

Dr. Richard Zalik was member of the Programme Committee and Plenary Speaker at the Workshop on Wavelets Frames and Applications that was held at the University of Delhi, India, in December, and co-editor of the proceedings of the workshop. His visit was funded by Auburn University and the University of Delhi. He was a member of the International Scientific Committee of the International Conference on Applied Mathematics and Approximation Theory held in Ankara, Turkey, during May 17-20, 2012. From May through August he was a visitor at the "Instituto Argentino de Matematica" in Buenos Aires, and delivered a lecture at the 4th. Latin American Congress of Mathematicians, held in Cordoba, Argentina in August. He is currently Local Secretary for the US of "Union Matematica Argentina". Dr. Zalik continued his service as member of the editorial boards of Journal of Applied Functional Analysis and International Journal of Mathematics and Computer Science". He has been a member of those boards for several years.

Dr. Jan Boronski received the 2012 AU Distinguished Dissertation Award and has been nominated for CGS/ProQuest Distinguished Dissertation Award. Dr. Boronski received his PhD from Auburn University (advisor: Krystyna Kuperberg) in 2010. He is a faculty member of AGH University of Science and Technology, Krakow, Poland.

Dr. Krystyna Kuperberg gave several talks and in particular plenary Lectures at the Conference on Intelligent Computer Mathematics, CICM 2011, Bertinoro, Forli (ITALY), July 18-23, 2011, and at the Workshop on Symplectic Dynamics, Institute for Advanced Study, Princeton, New Jersey, Oct. 10-14, 2011. She also organized the Mini-symposium "Matchbox Dynamics" and Satellite Thematic Session "Geometry in Dynamics" at the 6th European Congress of Mathematics, Kraków, Poland, July 2-7, 2012. See <http://www.auburn.edu/~kuperkm/dynamicsKrakow2012/>. She was appointed by the President of the AMS to American Mathematical Society Committee on Publications (CPUB) present - 2014. Dr. Kuperberg is the chair of the Advisory Committee for the Summer Topology and its Applications Conference Sequence.

Drs. Theodore Kilgore and Katherine Balazs (Kilgore) attended the "Wavelets and Applications" conference in St. Petersburg, Russia, July 10 - 17. Theodore Kilgore presented a talk which had been written jointly with K. Balazs. He also gave a conference dinner talk on the evening of the first day of the conference.

The department recruited thirty new graduate students this Fall, including fourteen new graduate teaching assistants, two students sponsored by foreign governments, and five students in other Auburn programs who are pursuing secondary degrees with us. Twenty-five of the new students are foreign nationals, representing countries as diverse as Brazil, Sri Lanka, China, Taiwan, South Korea, Turkey, Azerbaijan, Iran, Nigeria, and Cameroon. In all, we now have 120 students enrolled in our graduate programs, including ten who are pursuing secondary degrees with us.

The department very likely has a record high number of visiting scholars during different time periods: Fatih Koyuncu (hosted by Erkan Nane and Andras Bezdek), Yildirim Beyazit University, Ankara, Turkey; Yilmaz Aksoy (hosted by Erkan Nane and Narendra Govil) Erciyes University, Kayseri, Turkey; Onur Alp Ilhan (hosted by Erkan Nane and Yanzhao Cao) Erciyes University, Kayseri, Turkey; Danyal Soybas (hosted by Erkan Nane and Narendra Govil), Erciyes University, Kayseri, Turkey; Haci Aktas, Nevsehir University, Turkey (hosted by Erkan Nane and Ulrich Albrecht); Mehmet Eyup Kiris (hosted by Erkan Nane and Yanzhao Cao) Afyonkarahisar Kocatepe University, Turkey; Qin-qin Hu (hosted by Peng Zeng), Shandong University, Jinan, Shandong, China; Zhongbao Zhang and Hongwen Luo (hosted by Yanzhao Cao), College of Mathematics, Jilin University, Changchun, China; Ying Jiang (hosted by Yanzhao Cao), Sunt Yat-sen University, Zhongshan University, Guangzhou, China; Gulsen Kiral (hosted by Nedret Billor), Cukurova University, Turkey. More are on the way.

This past summer alone, sixteen students com-

pleted their graduate degree programs in the department, twelve with doctorates and four with master's degrees. In all, over the past year, thirty-five students graduated, including seventeen with doctorates and eighteen with master's degrees. They are:

- Gregory Scible (PhD advisor Dr. Ulrich Albrecht): *Assistant Professor, Valencia College in Orlando*
- Nidhi Sehgal (PhD advisor Dr. Chris Rodger) *A private start-up high tech company in California*
- Scott Varagona (PhD advisor Dr. Michel Smith) *Assistant Professor, University of Montevallo*
- Matthew Noble (PhD advisor Dr. Pete Johnson) *Assistant Professor, Francis Marion University*
- Bryce Duncan (PhD advisor Dr. Pete Johnson): *Instructor, Auburn University*
- Phillip (PJ) Couch (PhD advisor Dr. Curt Lindner): *Visiting Assistant Professor, Lamar University*
- Amin Bahmanian (PhD advisor Dr. Chris Rodger): *Instructor, Auburn University (Post-Doctoral Research Fellow, University of Ottawa, Canada)*
- Wesley Brown (PhD advisor Dr. Dean Hoffman): *Visiting Assistant Professor, Huntingdon College*
- Xuhua (Roy) Liu (PhD advisor Dr. Tin-Yau Tam): *Assistant Professor, University of Tennessee at Chattanooga*
- Daniel Roberts (PhD advisor Dr. Dean Hoffman): *Visiting Assistant Professor, Illinois Wesleyan University*
- Abigail Noble (PhD advisor Dr. Chris Rodger): *Instructor, Francis Marion University*
- Huybrechts Bindele (PhD advisor Dr. Ash Abebe): *Assistant Professor, University of South Alabama*
- Braxton Carrigan (PhD advisor Dr. Andras Bezdek): *Assistant Professor, Southern Connecticut State University*
- Nan Jiang (PhD advisor Dr. Dmitry Glotov): *Actuarial Associate, Prudential Financial*
- Caleb Petrie (PhD advisor Dr. Pete Johnson): *Assistant Professor, University for Information Science and Technology "St. Paul the Apostle", Ohrid, Republic of Macedonia*
- Jonathan Clark (PhD advisor Dr. Dean Hoffman)
- Vicky Colon Ohlson (PhD advisor Dr. Dean Hoffman) (Submitted by Xiaoying Han)

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

APSU Mathematics Department has added two new faculty. Audrey Bullock, MS from Austin Peay State University and Indranil Ghoish, Ph.D from University of California, Riverside.

Dr. Mary Lou Witherspoon retired this year. She will be missed in the department but we are grateful that she will be doing some post-retirement teaching for us.

Dr. William Glenn Stokes, 90, died Sunday,

Sept. 16, 2012. Dr. Stokes was professor emeritus of mathematics and former chair of the APSU Department of Mathematics from 1960 to 1985.

APSU Students present and win at the Tennessee Academy of Science Meeting at Belmont University on April 14, 2012. Student Presentations were as follows: A COMPARISON OF THE MAPPING PROPERTIES OF SCHLICHT FUNCTIONS AND HARMONIC FUNCTIONS. Tia Guarino, Lucas Johnson, Cory Medlin (Mentored by Dr. Ntatin), An Investigation of the Convergence of the Newton-Raphson Method in the Complex Plane. Mason Yost, James York-Winegar, and Cortney Bramlett (Mentored by Dr. Ntatin), (Won 3rd place) THE JOUKOWSKY AIRFOIL: TRANSFORMATIONS IN THE COMPLEX PLANE. Zaklina Cetic, Anne French, Yuri Kim, Arkadiusz Piasecki (Mentored by Dr. Ntatin), Second place was won by Ann French and Lilian Alvarez (Mentored by Dr. Sahi).

The APSU Mathematical Modeling team has received an Honorable Mention Designation in the International Contest in Mathematical Modeling. Team members are James York-Winegar, Mason Yost, and Michael Walker. Team sponsor and coach is Dr. Raman Sahi.

Students and Faculty present at MAA Southeastern Section Meeting in March. Students Liliana Alvarez, Anne French, Stephanie Jesse, and Corey Medlin presented papers earlier this month at the Southeastern Section Meeting of the Mathematical Association of America at Clayton State University, Atlanta, GA. These students were mentored by faculty members Dr. Samuel Jator, Dr. Raman Sahi, and Dr. Ben Ntatin. Faculty members Dr. Fola Agosto, Dr. Ben Ntatin, and Dr. Raman Sahi also presented papers, and Dr. Sahi taught a mini course on Introductory Knot Theory.

Students and faculty attended and presented at the MAA MathFest in Madison, WI. Presentations were given by Emarus Shay, "Symmetry Means Beauty ... Even in Nature" (Mentored by Dr. Ntatin), Cory Medlin, "Investigation the Mapping Properties of a Certain Classes of Harmonic Functions Defined on the Unit Disk" (Mentored by Dr. Ntatin), Liliana Alvarez, "Anagrams, Markov's and Knots" (Mentored by Dr. Sahi), Anne French, "Markov Chains in Literature: Re-Exploring Markov's Original Applications Using Modern Technology" (Mentored by Dr. Sahi). The conference was also attended by Stephanie Jessie, Megan Alvarez, and Reneice Glasper.

Nicole Mayo, Melissa Wickers and Dr. Agosto attended the 2012 annual meeting of the Society for Mathematical Biology (SMB) held in Knoxville TN in July. At the meeting Nicole gave a talk titled "A statistical analysis of the impact of behavior on the transmission of Mycobacterium tuberculosis infection and the development of drug-resistance strains". Ms Mayo was

mentored by Dr. Agosto who also presented a paper titled "Malaria drug resistance: The impact of human movement and spatial heterogeneity". Dr. Agosto co-organized the session on "Epidemiology of Multi-host Pathogens: Math and Biology Perspectives".

Congratulations to Dr. Samuel Jator and former students Robert French and Scott Swindell. Their paper "Trigonometrically fitted block Numerov type method for  $y''=f(x,y,y')$ " has been accepted for publication in the journal Numerical Algorithms.

APSU was a host site for the Middle Tennessee Region of the 55th Tennessee Mathematics Teachers Association Annual Mathematics Contest for high school students in May. We will once again be a host site for this contest next May. We also host the annual APSU middle school mathematics contest in May of each year, rewarding and encouraging young students to study mathematics. (Submitted by Jim Vandergriff)

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

The Department of Mathematics and Computer Science at The Citadel hired a new assistant professor, Rigo Flórez. Rigo received his Ph. D. from the State University of New York at Binghamton under the guidance of Professor Thomas Zaslavsky. His most recent position had been at USC – Sumter. Shankar Banik received tenure and was promoted to associate professor, while George Rudolph was promoted to associate professor. Les Cohn is on sabbatical for the fall semester, while Mei Chen will be on sabbatical in the spring semester. The department will host its second annual Math jeopardy competitions for Citadel students, one for upperclassmen on 23 October, and one for freshmen on 13 November. (Submitted by Dave Trautman)

### **Clayton State University (Morrow, GA)**

The Department of Mathematics successfully hosted two conferences this past spring. The 91<sup>st</sup> Annual Meeting of the Southeastern Section of the MAA was held March 9-10. The meeting was well attended and over two hundred presentations were given. Just a few weeks afterward, March 30-April 1, CSU hosted the Southern Regional Algebra Conference jointly with Georgia College and State University. This was another very successful conference, with 31 talks given from over 40 participants.

Clayton State welcomed one new tenure track assistant professor for 2012-2013, Tamara Pearson, who received her Ph.D. from the University of Florida. Dr. Christian Barrientos was awarded tenure and promoted to Associate Professor, and Dr. Weihong was promoted to Professor. Elliot Krop got married in May, and Patrick Taylor tied the knot in June.

Clayton State continued a focus on sending undergraduate students to present their research work at

conferences. Maria Morales-Beale, Michael Ngo and Tony Yaacoub all gave talks at the MAA-SE Section Meeting in March. Marcus Bartlett, Michael Bennington, Michael Ngo, and Tony Yaacoub presented at the 6<sup>th</sup> Biennial Smoky Mountain Undergraduate Research Conference at Western Carolina University as well as at the Eagle Undergraduate Mathematics Conference at Georgia Southern. In April, Marcus Bartlett, Candace Basu, Michael Bennington, Michael Ngo, Maria Morales-Beale, Jarvis Turner and Tony Yaacoub gave talks or presented posters at the 3<sup>rd</sup> Annual College of Arts & Sciences Academic Conference at CSU. Trani-sha Guthridge, Michael Ngo and Marcus Bartlett traveled to Morehouse to present at the 10<sup>th</sup> Annual Harriet J. Walton Symposium on Undergraduate Research. Chris Donovan presented his work on “Numerical Experiments in Determining Animal Coat Pattern Formation” at Western Kentucky University’s 32nd Annual Mathematics Symposium. (Submitted by Catherine Matos)

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

The Department of Mathematical Sciences at Clemson University added five new faculty members for the 2012-2013 academic year. Michael Burr received his Ph.D. from the Courant Institute of Mathematical Sciences in 2012. His area of research is in algebraic geometry. Akshay Gupte received his Ph.D. in operations research from the Georgia Institute of Technology in 2012. His area of research is cutting plane methods in integer programming. Christopher McMahan received his Ph.D. in statistics from the University of South Carolina in 2012. His area of research is categorical data analysis. Mishko Mitkovski received his Ph.D. in mathematics from Texas A&M University in 2010. His area of research is function theory. Finally, Svetlana Poznanovikj also received her Ph.D. in mathematics from Texas A&M University in 2010. Her area of research is enumerative and algebraic combinatorics.

Seventeen undergraduate students participated in research experiences for undergraduates or internships during the 2012 Summer. Cullen Baker worked as an actuarial intern at Coventry Health Care in Atlanta, GA.

Jessica Blood worked as an actuarial intern at Aon Hewitt in Charlotte, NC. Ryan Boyer worked as a supply-chain intern at VF Corporation in Greensboro, NC. Elizabeth Bruner worked as an actuarial intern at Lewis and Ellis in Dallas, TX. Megan Rose Bryant participated in a research experience for undergraduates at Marshall University, WV. Cassandra Buchta worked as an intern at Economic Partners in Denver, CO. Brad Burkett worked as an actuarial intern at Colonial Life in Columbia, SC.

Joel Clingempeel participated in a research experience for undergraduates at Louisiana State University, LA. Katelyn Coburn worked as an intern at National Grid in Melville, NY. Patrick Davidson worked as an actuarial intern at the Lincoln Financial Group in Greensboro, NC.

Meredith Harris participated in a research experience for undergraduates at James Madison University, VA. Rafael Hellebuyck participated worked as a teaching intern at Greenville Technical College in Greenville, SC.

Greyson Kerley worked as an actuarial intern at Unum in Chattanooga, TN.

Mark McDevitt participated in the Explorations in Statistics Research Workshop for Undergraduates at the University of California, Berkeley, CA. Christopher Ostrouchov participated in a research experience for undergraduates at Berkeley National Labs, Berkeley, CA. Rebecca Tkach worked as an aircraft certification intern at Gulfstream Aerospace in Savannah, GA. Finally, Sarah Vance worked as an intern at Michelin in Greenville, SC.

Dr. Charles Bradley Russell, long-time associate professor and instructor of actuarial students, retired in May 2012. Drs. Mark Cawood, Julie Lassiter, and Erwin Walker will take over teaching these classes.

Clemson's Putnam Exam team placed 46th in the 2011 William Lowell Putnam Competition. The team is coached by Dr. Neil Calkin.

Finally, 223 students participated in the Ninth Annual Clemson Calculus Challenge on Friday, April 20, 2012. The Clemson Calculus Challenge is organized by Drs. Shari Prevost and Terri Johnson. The Tenth Annual Clemson Calculus Challenge will be held on Monday, April 22, 2013. Information can be found at <https://mthsc.clemson.edu/cc/2013.html>. (Submitted by Mark Cawood)

#### **Coastal Carolina University (Conway, SC)**

The Department of Mathematics and Statistics at Coastal Carolina University welcomed one new assistant professor. Dr. Mary Wilkerson earned her Ph.D. from Virginia Tech in 2012 and Coastal snapped her right up; her research is in complex dynamics and using combinatorial methods to examine topological gluings of quadratic functions on the two-sphere. Two of our former undergrads, Victoria Hoffman and Melanie Vining, have come home to roost as lecturers, along with Michael Baron, Kevin Reynolds, Arianne Ross and Sarah Swartzel.

Our chair of eight (EIGHT) years, Dr. Prashant Sansgiry, has moved to greener pastures and is now an Associate Dean in the College of Science. Dr. Jim Sollazzo has stepped into those big shoes as our new chair.

Our most exciting news is a new preparatory

course: MATH 129L. Under the leadership of Dr. Keshav Jagannathan and Nyeita Schult, we're piloting a one credit ramp-up course for those incoming freshmen who struggled the most on the Course Compass math placement test. Students work through self-paced online modules covering the foundation material they'll need to succeed in later math courses. Instead of lecturing, faculty and student assistants move throughout the classroom offering help as needed, leaving room for students to direct their own active learning.

In recent class visits, students were on-task and involved – a refreshing change from most introductory level math courses. The environment is relaxed and non-judgmental, and because everyone's working independently, students can ask questions without an audience.

The final exam is a re-take of the placement test. We're looking forward improved scores, and improved performance down the road. We'll be watching the results closely. (Submitted by Tom Hoffman)

#### **Columbus State University (Columbus, GA)**

During 2011 the Columbus State University Department of Mathematics and Philosophy produced at least seven papers and gave at least ten research talks. Its faculty members and their students continue to be regular contributors to the problem sections of *The Monthly*, the *CMJ*, the *Math Magazine* and the *Pi Mu Epsilon Journal*. Our annual high school Mathematics Tournament drew 115 students from 11 schools.

Eight of our math majors completed their degrees. Putnam results received indicated that our 2010 team placed 92<sup>nd</sup> out of 545 teams. Our students taking the 2011 Major Field Test earned a group score at the 96<sup>th</sup> percentile. Student teams competed in the Math Jeopardy at the 2011 MAA meeting at the University of Alabama, the Team Problem Solving Competition at MUURMaC at Mercer University and the Calculus Competition at the Troy University MathFest 2011.

Eugen Ionascu received a \$3,000 grant for technology upgrades, Ben Kamau received a \$15,000 grant for a Supplemental Instruction project as part of the university's RPG initiative and Tim Howard (along with Debbie Gober, Cindy Henning and Kim Shaw) received a \$1,200,000 grant to start the Robert Noyce Teacher Scholarship Program. Gayle Herrington from Teacher Education and Kenneth Jones from the Columbus Regional Mathematics Collaborative received a grant for Math Circles for high school girls.

Tim Howard was appointed Director of the Math and Science Learning Center. Senior Lecture Ken Frerichs is retiring after eleven years at the university. Alin Stancu was awarded tenure. (Submitted by Richard Stephens)

#### **Elon University (Elon, NC)**

The Department of Mathematics and Statistics at Elon University has enjoyed an outstanding year of successful student and faculty achievements!

Our students and faculty gave a total of 40 professional presentations at various national and regional venues including the Joint Math Meetings, the Joint Stats Meetings, MathFest, NCUR, sectional meetings for the AMS and the MAA, and USCOTS. They also published a total of

13 research and education papers in a variety of math/stats journals including *CHANCE*, *College Mathematics Journal*, *Houston Journal of Mathematics*, *International Journal of Number Theory*, *Mathematics Teacher*, and *Teaching Statistics*. Additionally, seven of our students participated in internships across the country, and 12 of our students were inducted into national honor societies: 2 into Phi Beta Kappa and

10 into Pi Mu Epsilon.

The following students received external recognition for their research and teaching accomplishments. Amanda Bienz ('12) was awarded an NSF Graduate Research Fellowship. She will begin her doctoral studies in scientific computing this fall at the University of Illinois at Urbana-Champaign. Trevor Edwards ('12) had his research published in the *International Journal of Pure and Applied Mathematics*. His project, in the area of number theory, studied field extensions of the p-adic numbers and their associated Galois groups.

Kathryn Huffman ('12) received the Outstanding Mathematics Education Student for the central region of the North Carolina Council of Teachers of Mathematics. She is the 14th Elon student to receive this award since its inception in 1986.

Two of our faculty members received funding from the National Science Foundation this year. Faculty member Alan Russell is serving as an origami expert consultant on a \$1.7 million NSF grant (#1240438). The research objective of this project is to study a new class of origami by means of polymer sheets that fold in response to external triggers (i.e., light), for hands-free folding. The grant is funded through the office of Emerging Frontiers in Research and Innovation (EFRI).

Faculty member Janice Richardson is serving as Co-PI on a \$1.2 million NSF grant (#1136399) to partner with the Alamance-Burlington School System to recruit, prepare, and support eighteen undergraduate Mathematics, Biology, Chemistry, and Physics majors as they become secondary-level teachers. The grant is funded through the Robert Noyce Scholarship Program.

The department is under new leadership. Faculty member Ayesha Delpish has been selected to serve as chair, and she brings to this role her inspiring passion as an accomplished teacher-scholar. We are grateful to our out-going chair, Jeff Clark, for his service in this role these last six years.

The department welcomed its newest member, Qie Li, who joins us as a Lecturer in Statistics this fall after completing his Ph.D. from Bowling Green State University. We are currently inviting applications for another Lecturer position to begin fall 2013. Look for the job announcement in late 2012.

We invite interested parties to visit our department webpage <[http://www.elon.edu/e-web/academics/elon\\_college/mathematics\\_statistics/](http://www.elon.edu/e-web/academics/elon_college/mathematics_statistics/)> for complete details on our faculty/student achievements for the 2011-2012 academic year. (Submitted by Chad Awtry)

#### **Emory University (Atlanta, GA)**

Hao Gao joined the scientific computing group in the department this fall as an assistant professor. He has a joint appointment with the Department of Radiology and Imaging Sciences.

Professor Vojtech Rödl and Emory graduate Mathias Schacht received the George Pólya Prize from SIAM. The prize is awarded every two years for specific work in areas of mathematics that were of interest to Pólya; they received it for their work on the regularity method for hypergraphs.

More than 10 million people saw Professor Aaron Abrams or Skip Garibaldi on various TV programs, where they were interviewed about the lottery. A display about Skip Garibaldi is included in the traveling museum exhibit *MathAlive!*; the exhibit was on display at the Smithsonian this spring. Aaron Abrams has left Emory and joined the faculty at Washington and Lee University.

Professor Michele Benzi was elected a fellow of SIAM. And, by the time you read this, Professor Ken Ono will have given the 2012 AMS Erdos lecture "Adding and counting". Professor R. Parimala will deliver the AWM Noether lecture "A Hasse principle for quadratic forms over function fields" at the 2013 Joint Mathematics Meetings in San Diego this January. (Submitted by Skip Garibaldi)

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

The Mathematics faculty at Francis Marion University had an eventful year. Our annual Pee-Dee Regional High-School Mathematics Tournament was held on December 6, 2011 and attracted approximately 250 students from at least 15 different high-schools. A written competition is administered in the morning to determine which schools advance to the final round. Those schools then send a team of four students to answer questions on a stage. The next tournament is scheduled for December 4, 2012.

On March 30, 2012, FMU held its annual Francis Marion Undergraduate Mathematics Conference (FMUMC). The FMUMC provides undergraduates a venue to present research projects. The keynote speaker

was Dr. Chris Rodger from Auburn University. The FMUMC will be held next on March 29, 2013.

We are proud to announce some new faculty members. We welcome Dr. Matthew Noble as Assistant Professor and Dr. Abigail Noble as Instructor. Dr. David Szurley was awarded tenure. Associate Professor Mrs. Jane Gower retired after 18 years of teaching. As always, we are looking forward to the new academic year! (Submitted by Dave Szurley)

#### **Georgia College (Milledgeville, GA)**

The Department of Mathematics welcomes three new tenure-track Assistant Professors: Dr. Susmita Sadhu, Dr. Brandon Samples, and Dr. Hong Yue. Susmita received her Ph.D. in Mathematics from the University of Pittsburgh. Susmita comes to us from Southwest Minnesota State University where she served as Assistant Professor of Mathematics. Her research interests are in the areas of perturbation theory, dynamical systems, and partial differential equations. Brandon received his Ph.D. in Mathematics from the University of Georgia in May 2012, and he also has a Graduate Certificate in Mathematics Education from UGA. His research interests include algebra, Lie theory, and representation theory. Hong received her Ph.D. in Mathematics from Concordia University in Canada. Hong comes to us from Trine University where she served as Assistant Professor of Mathematics. Her research interests are in the areas of harmonic analysis, partial differential equations, and geometric measure theory.

For the past two years, Dr. James Baugh has served as a Limited Term faculty member at Georgia College, but this year he joins our department as a Lecturer of Mathematics. He has an M.S. in Mathematics as well as a Ph.D. in Physics from Georgia Tech. His research interests include Lie algebras and Lie groups quantum gravity.

Dr. Angel Abney was awarded tenure and promoted to Associate Professor. (Submitted by Martha Allen)

#### **Georgia Gwinnett College (Lawrenceville, GA)**

GGC's Mathletes welcomed Dr. Stan Perrine and Dr. Boyko Gyurov as Associate Professors. We bid a temporary farewell to Dr. Barry Biddlecomb, who became the interim Dean for the School of Transitional Studies in place of Dr. John Muth, who is glad to be back with us doing what he loves best. We are also excited to announce that our first math majors will graduate this year! (Submitted by Amy Erickson)

#### **Georgia Highlands College (Cartersville,**

**GA)**

Georgia Highlands College welcomed three new full-time mathematics faculty members this fall—Cara Harrell, Paul Kapitza, and Gretchen Kotz. Another faculty member, Camille Hernandez Pace, moved from a lecturer position into a tenure-track instructor position. Jeff Linek was named full-time Director of eLearning. (Submitted by Carla Moldavan)

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

Since last year's report, we have said good-bye to Mohandas Raj and term-to-term instructors Margaret "Chuckie" Hairston and Joseph Shackelford.

Our developmental math program has undergone a major redesign. After a few years of research, visiting other institutions, and piloting different programs at our six campuses, GPC has switched to a self-paced, web-based course. Starting this fall, school-wide, our developmental math classes are taught in computer classrooms using ALEKS software. At Clarkston Campus, our computer classroom has 60 laptop computers which can accommodate two class sections at a time. Student Development Specialists and tutors will be hired to help with academic student support.

So how is this all being funded? GPC was awarded a \$1.25 million, 5-year grant from the Department of Education. The purpose of Project RAISE (Raising Achievement and Increasing Success in Education) is to increase the academic success, retention, and graduation rates of African American males as well as all students enrolled in Learning Support mathematics.

Dr. John Weber received a NSF grant for his project, "Collaborative Research: Project UPLIFT (Universal Portability of Learning Increased by Fun Teaching)".

Several department members have also been awarded institutional STEM Faculty Mini-Grants. Dr. Kinnari Amin, Mr. Ashraf Chowdhury, Dr. Patricia Jayne, and Dr. Allison Wolf received a mini-grant for their College Algebra project, "More Effective Resources → Better Results".

In the AMATYC Student Math League competition, GPC won first place in the Southeast Region. Clarkston students, Huong Tran and An Phan, placed second and fourth in the Southeast Region.

Clarkston, Decatur, and Dunwoody campuses sent teams to the Gainesville State College Mathematics Tournament. GPC came in first overall and our students did very well in the individual competition. Three Clarkston students placed in the top five: Huong Tran, An Pham, and Trung Quach placed first, second, and fifth, respectively.

The 26th Annual Georgia Perimeter College Math Conference will be held on Clarkston Campus,

February 15-16, 2013. For further information about attending or presenting at the conference, contact [ginny.powell@gpc.edu](mailto:ginny.powell@gpc.edu) or go to <http://depts.gpc.edu/~gpcmathc/>. (Submitted by Alice Eiko Pierce)

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

We have one new tenure-track faculty member this year: Arpita Chatterjee (Ph.D. Northern Illinois University), who is an Assistant Professor of Statistics.

The following members of our department were promoted and/or granted tenure: Yan Wu was promoted to Professor, Hua Wang was promoted to Associate Professor, Shijun Zheng was granted tenure and promoted to Associate Professor. In addition, Alex Stokolos and Drew Sills were granted tenure. Congratulations to these!

Due to the departure of our dean for a position as the dean of the College of Arts and Sciences at Oklahoma State University, our own Martha Abell (section Governor) is serving as interim dean of the new College of Science and Mathematics, which was formed after the engineering disciplines were reorganized into the College of Engineering and Information Technology. Sharon Taylor is serving as interim department chair.

The 24<sup>th</sup> annual Mathematics Tournament for middle and high school participants was held February 11, 2012 and once again had more than 800 participants. We should be just as successful with this year's tournament which will be held March 9, 2013.

Three of our faculty members were recognized during the year for their accomplishments. Pat Humphrey was announced in May as a winner of the 2012 Georgia Southern Award for Excellence in Contributions to Service. She will discuss "A Broken Stool?" as a part of the Focus on Excellence Program for winners of University-level awards on February 26, 2013. Joy Darley was the winner of the 2012-2013 COSM Award for Excellence in Teaching. Last March at the section meeting, Hua Wang was announced as the winner of the 2012 Beginning Faculty Teaching award for the section.

In student news, James Diffenderfer earned first place in the GSU Graduate Research Symposium last spring and had his paper "A bijection between two classes of restricted compositions" accepted for publication in the *Fibonacci Quarterly*. Katie Milhous earned second place in the College Office of Undergraduate Research Poster session in April. Both of these students were undergraduates at GSU and are now in our master's degree program, which saw nine students successfully complete their degrees in May and August. (Submitted by Pat Humphrey)

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

Dr. Flor Espinoza-Hidalgo joins us as a new

tenure track faculty and Dr. Linda Galloway is a new lecturer.

Dr. Sherry Ni and Dr. Daniel Yanosky were promoted to Associate Professor and Dr. Bo Yang was promoted to Full Professor

Dr. Jonathan Lewin won the University Distinguished Teaching Award, Dr. Meghan Burke won the University Distinguished Service Award, Dr. Ana-Maria Croicu won the College of Science and Mathematics Distinguished Teaching Award and Dr. Jennifer Priestley won the Distinguished Professor Award at the SAS Global Forum.

Round 1 of the seventh annual Kennesaw State University Mathematics Competition for Georgia high school students will take place in participating schools on October 31, 2012. Last year, almost 2,000 students from 130 Georgia public and private high schools participated in the competition. Students whose scores on Round 1 place them in the top 10% statewide will be invited to compete in Round 2 on January 29, 2013. For more information about the competition and to view questions and solutions from prior years, visit the competition website, <http://math.kennesaw.edu/happening/events/competition/index.html>. (Submitted by Virginia Watson)

#### **Mercer University (Macon, GA)**

The Department of Mathematics welcomed two new colleagues this fall. Dr. Jennifer Ellis is a new assistant professor of mathematics. She earned a Ph.D. and M.A. in Mathematics at the University of Georgia and a B.S. in Mathematics at Union University. Her research area is differential geometry. Dr. Jeffrey Pullen, who earned a Ph.D. in Mathematics at Tulane University and a B.S. in Mathematics at Berry College, is a visiting assistant professor of mathematics. His research area is algebraic topology.

Christopher Kirkland is the recipient of the 2012 Riley Plymale Award for Excellence in Mathematics. This award is presented to the senior mathematics major whose work has been judged to be exemplary by the mathematics faculty. Chris is now a student in the Ph.D. program at North Carolina State University.

The Twenty-Eighth Annual Mercer University High School Mathematics Contest will be held November 10, 2012. More information is available at <http://www.mercer.edu/math/mathcontest/index.html>.

The Fifth Biennial Mercer University Undergraduate Research in Mathematics Conference (MUURMaC) will be held February 9, 2013, on Mercer's Macon campus. In addition to a

plenary presentation by Dr. Michael Dorff from Brigham Young University and fifteen-minute talks by undergraduates, there will be a friendly math competition and a panel discussing REU experiences. The conference will take place in conjunction with the Georgia MAA State Lunch. For more information or to register for either the conference or the GA MAA State Lunch, please visit <http://www.mercer.edu/math/muurmac/index.html>. (Submitted by Curtis Herink)

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

**Dr. Guoqing Tang** was appointed Chair of the Department of Mathematics, effective July 1, 2012. Dr. Tang had been serving very effectively as Interim Chair since the retirement of long-serving chair Dr. Wilbur Smith. He was permanently appointed after a national search.

**Dr. Shea D. Burns** was appointed Associate Chair of the Department of Mathematics, effective October 1, 2012. Dr. Burns has assisted Dr. Tang as Acting Chair Summer 2012, and Summer 2010. The position of Associate Chair is a new position in the Department of Mathematics.

**Dr. Zachary Denton** was appointed as tenure track Assistant Professor, effective July 1, 2012. Several faculty have been hired as adjunct faculty.

The Mathematics department underwent External Review in Spring 2012.

**Dr. Kathy Cousins-Cooper** is coordinating the implementation of a pilot project to adapt the Math Emporium model to the instruction in NCA&T's Math 101 and Math 102, which is College Algebra. This is a general education course for those not majoring in STEM disciplines or business. In addition **Dr. Thomas Redd, Dr. Nicholas Luke, and Mr. Samuel Casterlow** are involved in the pilot effort, which involve eight sections, four each of Math 101 and Math 102. A workbook was developed by **Dr. Kathy Cousins-Cooper, Dr. Nicholas Luke, and Dr. Richard Noble**, who were given release time to develop it Spring 2012. It is now being used in this effort. A past attempt with the Emporium model, led by Dr. Tang and involving several faculty, was not fully implemented and only served as a tutoring center. The current team visited Alcorn State in Mississippi, and collaborated with GTTC, in addition to using its knowledge of the Virginia Tech effort, to get ideas for the current approach. Results will be compared to traditional sections before further implementation takes place.

**Dr. P. Varatharajah** is coordinating the implementation effort to adapt the SCALE-UP model to in-

struction in Calculus I. **Dr. Dominic Clemence, Dr. Varatharajah,** and **Dr. Barbara Tankersley** submitted a local innovation grant that funded the conversion of a large classroom into a technology enhanced, learner-centered classroom with tables, rather than desks. This team visited NC State to observe SCALE-UP in action and talk to those involved. During Spring Break 2012, **Dr. Varatharajah, Dr. Clemence, Dr. Tankersley, Dr. Oldham**, and others from A&T visited Clemson University's math department, and science and math departments at University of Maryland, Baltimore County to learn more about the SCALE-UP approach. Summer Session II Dr. Varatharajah ran a pilot Calculus I taught with SCALE-UP. This Fall 2012 semester sees SCALE-UP (and all its challenges) being implemented in Calculus I taught by the four faculty members listed above, as well as **Dr. Zachary Denton**.

The Department of Mathematics held its annual Math Awareness Day in April 2012 as part of the national observance of Math Awareness Month. The event was organized by the Dr. Alexandra Kurepa. She has continued its focus as being a student conference, with NCA&T graduate student presentations as well as undergraduate paper and poster sessions. This year, in keeping with the tone of the department's External Review, the lunch was a working lunch, where students were given the opportunity to give their advice or opinion on anything they felt would improve the department. It was an informative lunch!

The Math department again hosted high school students participating in the state high school math contest the last Thursday in March. NCA&TSU is a regional site. Dr. Bampia Bangura coordinated the effort. Dr. Bangura was assisted by the Dr. Shea Burns, NCA&T chapter of the NCCTM, Pi Mu Epsilon members, and faculty volunteers.

**The Gilbert and Patricia Casterlow Scholarship** annual fund raiser takes place every October, and is supported by Dr. Casterlow's colleagues in the mathematics department through annual giving to the United Way and through attendance and donations at the annual fundraiser. Dr. Casterlow is Professor Emeritus.

For those colleagues who often ask about Dr. Casterlow's health, he is still doing well, and leads an active retirement with his wife Patricia, including service to others, of course!. This summer an especially poignant event took place...the wedding of Gilbert and Patricia Casterlow's second daughter, Laveda. The bride and groom chose to be married on her parents' wedding anniversary. It was especially moving to note the broad smile on Dr. Casterlow's face as he walked his tearful daughter down the aisle. Everyone understood the tears. We all knew that in addition to the joy of marrying the man she loved, and the joy of looking forward to cele-

brating her wedding anniversaries on the same day as her dear parents, there was the joy and gratitude of the presence of her father and being on his arm that special moment as she walked toward the man to be her husband. Witnessing this happy occasion were Dr. Guoqing Tang, and his wife, Dr. Robert Mers and his wife, Dr. Janis Oldham, Dr. Shea Burns, and others from A&T. (Submitted by Janis Oldham)

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

**New Assistant Professor:** Jonathan Hauenstein, received his PhD 2009, in Mathematics, from the University of Notre Dame. **New Post-Docs:** Brice Boyer, received his PhD 2012, University of Grenoble, France; Nicolette Meshkat, received her PhD 2012, UCLA; Kevin Flores, received his PhD 2009, Arizona State University; Erica Graham, received her PhD 2012, University of Utah; and Maria Vega, received her PhD 2011, Louisiana State University. **Promotion:** Mansoor Haider to full professor **Sabbaticals:** Zhilin Li, Tao Pang, Naihuan Jing, Dmitry Zenkov **Visitors:** Professor Tongke Ning, Professor Yong Gu Kim, Professor Honglian Zhang.

**Placement of 2012 PhD graduates:** Adam Attarian (Advisor Tran) is working at MIT-Lincoln Labs; Christina Erbacher (Advisor: Misra) is Educator Assistant Professor, Dept. of Mathematical Sciences, University of Cincinnati; John (JT) Hurd (Advisor Stitzinger), is Assistant Professor, Dept. of Mathematics, West Virginia University Institute of Technology; Sarah King (Advisor Ito) is a Research Associateship from NRC at Naval Research Lab, Monterey, CA; David Mokrauer (Advisor Kelley) is working at BAE Systems, Boston, MA; Evan Wilson (Advisor Misra) is a Post-Doc at Instituto de Matematica e Estatística, Universidade de Sao Paulo, Brazil; Sheng-Jih Wu (Advisor Kang) is a Post-Doc at Academia Sinica, Taiwan.

**Graduate student awards:** Nicholas Lowman was awarded a NSF Graduate Research Fellowship, and Scott Batson was awarded a SMART scholarship (from DoD, equivalent to a fellowship) sponsored by the Space and Naval Warfare Systems Command Atlantic in Charleston, SC.

The National Science Foundation (NSF) has renewed its support for the Statistical and Applied Mathematical Sciences Institute (SAMSI) in Research Triangle Park. The new \$17.5 million award for 2012-2017 will be split among SAMSI's sponsors: NC State, Duke, UNC Chapel Hill, and the National Institute of Statistical Sciences.

Four of the eight poster prizes at the 2012 Society for Industrial and Applied Mathematics Conference

on the Life Sciences went to students associated with NC State.

Michele Benzi, Professor of Mathematics and Computer Science at Emory University and a 1993 NC State Mathematics Ph.D., has been named a Fellow of the Society for Industrial and Applied Mathematics (SIAM). He was recognized for "contributions to numerical linear algebra and its applications, especially sparse linear systems and preconditioning."

Professor Alina Chertock is part of one of the NSF's first Research Networks in the Mathematical Sciences. The "Kinetic Description of Emerging Challenges in Multiscale Problems" network (KI-Net) includes 25 core participants at institutions in the US and Europe.

Three of the ten plenary speakers from outside India at the International Conference on Mathematical and Theoretical Biology in Pune, India, were members of the NC State Mathematics Department (Tom Banks, Sharon Lubkin, and Hien Tran).

Assoc. Prof. Seth Sullivant has been elected Chair of the Society for Industrial and Applied Mathematics Activity Group on Algebraic Geometry.

Drexel Professor of Mathematics Tim Kelley has been named chair of the Board of Trustees of the Society for Industrial and Applied Mathematics.

Assoc. Prof. Tao Pang and two coauthors won the 2011 Best Paper Prize of the Society for Industrial and Applied Mathematics Activity Group on Control and Systems Theory.

There is a new undergraduate biomathematics (UBM) initiative at NC State. Funded by the NSF, the UBM program offers the chance to carry out cutting-edge research at the interface of mathematics and biology. Eight students a year, four from the mathematical sciences and four from the biological sciences, receive summer stipends as part of a year-long research experience. Research projects will be carried out teams of four students, under the supervision of two faculty members. Both student and faculty participants will be drawn equally from biological and the mathematical sciences. Additional project support will be provided by graduate student assistants. (Submitted by Jeff Scroggs)

#### **Salem College (Winston-Salem, NC)**

Wenzhi Sun, Associate Professor of Mathematics, who had been teaching at Salem College since 1991, retired at the end of the 2011 - 2012 academic year. During his years at Salem, he was selected as the Omicron Delta Kappa Teacher of the Year (2000) and as the recipient of the H. A. Pfohl Award for outstanding teaching and service to the College (2012). Wenzhi will be missed at Salem, but will still be a part of the department's annual Math Party--none of us can go without his famous dumplings for more than a year! We wish him good health in his well-deserved retirement.

The department hired Wade Mattox, who completed his PhD at Virginia Tech this summer, as Assistant

Professor of mathematics. Wade will be take over responsibility for our modern algebra course and eventually our computer programming course. Wade's expertise will provide plenty of topics for undergraduate research projects and we are pleased to have him join us. In addition, Debbie Harrell is completing her 30th year at Salem, while Paula Young is completing her 20th, so we are excited to have fresh ideas and new energy in our midst.

We added a minor in statistics in 2011 and have seen the number of mathematics majors and minors (and new statistics minors) grow significantly in the past two years. We are looking forward to bringing many of these students to regional and national meetings this year and to seeing all of you there. (Submitted by Paula Grafton Young)

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

Class of 2012 members Mary Michael Forrester and Prashanta Kharel were this year's recipients of the senior Hooke Prize in mathematics. Prashanta was this year's University Valedictorian. Following graduation, Mary Michael is teaching English in Haiti and Prashanta is continuing the graduate work in applied physics at Columbia University that he began after his junior year at Sewanee. Sixteen majors in mathematics or computer science graduated in May 2012.

Gaston Swindell Bruton Professor of Mathematics William McGowen Priestley (Class of '62) retired in May 2012 after forty-five years of distinguished faculty service at Sewanee. In April, William Dunham, Koehler Professor of Mathematics at Muhlenberg College, gave a lecture, *A Celebration of Euler*, honoring Professor Priestley's contributions to the University of the South and the larger mathematical community. During his years as a Sewanee faculty member, Dr. Priestley published two books on calculus from an historical approach and papers in analysis and the history and pedagogy of mathematics. He was the 2006 recipient of the Distinguished Teaching Award of the Southeastern Section of the MAA.

Jared Weiss, Class of '12, has begun a graduate program in mathematics at University of Tennessee Knoxville. John Ingram, Class of '12, is in the doctoral program in computer science at Clemson University continuing his work on computer vision begun during a summer Research Experience for Undergraduates there. Michelle Brasse, Class of '07, is using her actuarial experience to do trust fund projections for the Social Security Administration in Baltimore. Scott Garland, Class of '01, is with Reynolds and Reynolds in Houston lead-

ing a team in design of software and hardware. Ed Gerber, Class of '00, completed his Ph.D. at Princeton and now works as a climate scientist and assistant professor in New York University's Courant Institute of Mathematical Sciences. Nick Bennett, Class of '91, earned his Ph.D. at Yale and is doing oilfield research for Schlumberger-Doll in Connecticut. The Rev. Becca Stevens, Class of '85, is now chaplain of St. Augustine's Episcopal Chapel at Vanderbilt University and continues as the executive director of Magdalene House, a residential community for women. The 2012 Homecoming Lecture will be given this fall by Georgi Kapitanov (Class of '07), who completed his doctorate in mathematics at Vanderbilt in May and is now a postdoc at Purdue.

Professor John R. Swallow, Class of '89, formerly Kimbrough Professor of Mathematics and Humanities at Davidson College, became Sewanee's Provost this year following his service earlier in 2011-12 as Acting Provost; he continues to serve as an associate editor of the *Notices of the American Mathematical Society*. Professor Linda Bright Lankewicz, whom Professor Swallow succeeded as Provost, is on sabbatical leave to develop new courses in data mining and educational technology; she will return to full-time faculty service in the computer science program in January 2013. Professor Emily Puckette completed five successful years as the Mathematics and Computer Science Department Chair, and Associate Professor Doug Drinen became Chair in July 2012.

Dr. Drinen was recognized by the Society of Sewanee Scholars in 2011-12 for his innovative and compassionate approach to teaching and learning. He was chosen to speak about his creative mathematical modeling project assignments that encourage student initiative and ingenuity. He also gave a well-received public lecture in March on the mathematics of bracketology.

The 2012 Sewanee-Rhodes-Hendrix Mathematics Symposium was held at Rhodes College in April. Sewanee was represented by two students and two faculty members, and senior mathematics major Martha Cook gave a talk on Ramsey Theory. Two students and one faculty member attended the annual meeting of the Southeastern Section of the MAA.

Professor Thomas Banchoff of Brown University was the University's 2011-12 Ebey Lecturer. He gave two talks during his February visit, *Salvador Dali's Art, Geometry, and Theology* for a University-wide audience and *Distinguishing Cylinders from Moebius Bands, Smooth and Polyhedral* for the department's students and faculty. (Submitted by Joel Cunningham)

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

Sylvia Bozeman gave the National Association

of Mathematicians (NAM) Cox-Talbot address at the January Joint Mathematics Meetings in Boston, MA. The title of her address was "Creating Mathematical Scientists Among the Underrepresented".

Dr. Bozeman was also the James R. Leitzel speaker at MAA's MathFest in Madison this August. In her address titled "The Many Faces of Mentoring", she spoke of the importance of mentoring, especially for minority women.

Jeffrey Ehme gave a short course on an introduction to variational calculus at the MAA Southeastern section meeting, which took place at Clayton State University in March.

Colm Mulcahy gave an MAA Minicourse "Mathemagic with a Deck of Cards" at MathFest in Madison. This fall, he started a new national mathematical blog: <http://www.huffingtonpost.com/colm-mulcahy/>.

Dr. Nagambal Shah was a steering committee member for the 2012 Infinite Possibilities

Conference held at the University of Maryland, Baltimore County, in March. In June, Dr. Shah

was an invited speaker at Computational Thinking: A Focus Group Meeting, held at the London Knowledge Lab in London, England. At the Joint Statistical Meetings in San Diego, Dr. Shah was a member of the planning team, as well as a presenter and moderator for the Diversity and Mentoring Workshop. In October, Dr. Shah was a member of the organizing team and moderated two sessions at StatFest 2012, which took place at San Francisco State University.

The department held its 8<sup>th</sup> annual Etta Z. Falconer Lecture in April. The speaker was Spelman graduate Dr. Kimberly Weems, Associate Professor of Statistics at North Carolina State University. Dr. Weems' talk was titled "Significant Effects: The Influence of Spelman on My Career and Beyond".

The department welcomed new faculty member Dr. Viveka Borum as assistant professor of mathematics. Dr. Borum received her Ph.D. in mathematics education from Teachers College, Columbia University.

Dr. Borum co-authored an article, "Coming Full Circle", in the September 2012 issue of the journal *Mathematics Teaching in the Middle School*.

Ms. Dominique Waters joined the department as a teaching fellow for Math RaMP (Mathematics Research and Mentoring Program). Ms. Waters has an M.S. degree in applied mathematics from Hampton University. (Submitted by Yewande Olubummo)

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

Nicole Pascu was promoted to Associate Professor. He also published a book, "Problems and Solutions in Complex Analysis". William Griffiths was pro-

moted to Associate Professor. L. R. Ritter was promoted to Associate Professor. Yang Kang was hired as a Lecturer. Claudia Spiro was hired as Assistant Professor and to assist with our new Teacher Education program.

Meighan I. Dillon, Professor of Mathematics, visited the Université de Technologie Belfort-Montbéliard (UTBM) in France during May and June 2012, as part of a Fulbright Specialists project.

Professor Dillon was awarded a Fulbright Grant in early 2012. (Submitted by Steve Edwards)

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

We have appointed Anton Schep as our new chair, and we have newly hired Jesse Kass. Jesse is an algebraic geometer, a student of Joe Harris at Harvard; he is on leave in Germany for the coming year and will join us next fall.

South Carolina will host the Palmetto Number Theory Series conference from December 1 and 2. Invited speakers include Benedict Gross, Winfried Kohlen, Carl Pomerance, Wei Ho, and Alyson Deines, and there will be room for contributed talks as well. Funding is available for all participants; please contact us for more information.

South Carolina will host its annual High School Mathematics Contest on January 26. Teams from anywhere, including outside the state, are invited to attend, and top prizes include scholarships to USC. (Submitted by Frank Thorne)

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

Dr Hani Abu-Salem was promoted to Professor of Computer Sciences in July 2012. Dr Zhenheng Li was an organizer of a workshop in “Algebraic Monoids, Group Embeddings and Algebraic Combinatorics” at the Fields Institute, University of Toronto, July 3-6, 2012. (Submitted by Reginald Koo)

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

University of Tennessee at Martin Assistant Professor Karoline Pershell taught summer session mathematics courses at Qingdao University in China. She will be teaching in Hyderabad, India during Spring 2013 as a Fulbright Scholar. One of our student papers presented at last spring’s SE MAA meeting has been accepted for publication in the journal *Involve*. Two papers were presented by our students at Mathfest this summer, both have been submitted for publication. After many years of dedicated service, Judy Gathers has retired. (Submitted by Chris Caldwell)

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

Robert Erhardt, a new Ph.D. in statistics from UNC, has joined our faculty as an Assistant Professor. Jason Parsley was promoted to the rank of Associate Professor. Stephen Robinson was awarded the Wake Forest Wright Family Faculty Fellowship, and Ellen Kirkman was awarded the Wake Forest Shively Family Faculty Fellowship; these awards were made for contributions to teaching and research. Research leaves were awarded to Jeremy Rouse for the fall semester of 2012 and to Miaohua Jiang for the spring semester of 2013. Sarah Raynor was awarded the 2011 Wake Forest University Postdoctoral Mentor of the Year Award for her outstanding contributions as a mentor to our postdoctoral scholars. Former Wake Forest Teacher-Scholar Postdoc Keir Lockridge joined the faculty at Gettysburg College in Gettysburg, Pennsylvania as an Assistant Professor this fall. Pete Goetz from the mathematics faculty at Humboldt State University in Arcada, California is spending his fall 2012 semester sabbatical at Wake Forest.

Wake Forest hosted the Palmetto Number Theory Series (PANTS) September 15-16, 2012 and the Southeastern-Atlantic Regional Conference on Differential Equations (SEARCDE) October 19-20, 2012.

Wake Forest’s 2012-13 Gentry Lectures will be given by Jill Pipher, Director of the Institute for Computational and Experimental Research in Mathematics (ICERM) and Professor of Mathematics at Brown University. She will speak on April 29 and 30, 2013. (Submitted by Ellen Kirkman)

#### **Winthrop University (Rock Hill, SC)**

Trent Kull was promoted to the rank of Associate Professor. Joe Rusinko received the first annual Winthrop Undergraduate Mentor Award for his contributions to undergraduate research.

Winthrop hosted its third annual Research Experience in Mathematics summer program. Ten students participated from various majors at WU and worked with faculty Kristen Abernathy, Zach Abernathy, and Joe Rusinko on mathematical models of cancer networks.

Mathematics majors Johnakin Martin and Hannah Swan have been selected to attend the Field of Dreams Conference in Phoenix, Arizona. Hannah Swan was also selected as a McNair Scholar and recently presented her summer work at the IVY PLUS Symposium at the University of Pennsylvania. Matthew Neal and Wayne Anderson attended a weeklong workshop at the Mathematical Bioscience Institute (MBI) where they presented their work from this summer’s Research Experience in Mathematics program.

Three WU alumni are currently working toward their Ph.D. in Mathematics. They are: Michael Capps (Colorado State University), Marvin Jones

## **CALL FOR NOMINATIONS FOR THE 2013 SOUTHEASTERN SECTION DISTINGUISHED SERVICE AWARD**

The Southeastern Section of the MAA is delighted to present a Distinguished Service Award at its annual Spring Meeting each year. Any member of the Section who is an outstanding contributor to our Section is eligible for nomination. The person selected for 2013 will be honored March 15-16, 2013, at Winthrop University, Rock Hill, SC.

The Section Distinguished Service Award Committee encourages members of the Section to nominate deserving persons for this award. Please send your nomination(s) along with the nominee's vitae and other supporting material/letters, all as electronic documents, to Ray Collings, Committee Chair, using [ray.collings@gpc.edu](mailto:ray.collings@gpc.edu). We ask that you make every effort to gather these materials without the awardees knowledge. The Section tradition is to surprise the nominees with the award on the Friday of the annual meeting. Nominations for previous award years which were not successful can be carried forward for the 2013 award if the nominator so notifies Professor Collings by the submission date. And please feel free to ask Professor Collings any questions about the process and what is needed. Your participation is vital and much appreciated. Thank you so much for your consideration and action.

### **NOMINATIONS FOR THE 2013 AWARD ARE DUE BY NOVEMBER 30, 2012**

The Section Award was made in even numbered years from 1990 to 1996 and annually since that time. The following is a list of recipients:

April 1990 Trevor Evans, Emory University  
April 1992 Billy F. Bryant, Vanderbilt University  
April 1994 James G. Ware, Univ. of Tenn., Chattanooga  
April 1996 Marcellus Waddill, Wake Forest University  
March 1997 John Kenelly, Clemson University  
March 1998 David Stone, Georgia Southern University  
March 1999 M. F. Neff, Emory University  
March 2000 Tina Straley, MAA Executive Director  
March 2001 Charles Cleaver, The Citadel  
March 2002 Sharon Cutler Ross, Georgia Perimeter College  
March 2003 Sylvia Trimble Bozeman, Spelman College  
March 2004 Theresa E. Early, Appalachian State University  
March 2005 Hugh Haynesworth, College of Charleston  
March 2006 Stephen Davis, Davidson College  
March 2007 Joel Brawley, Clemson University  
March 2008 Benjamin G. Klein, Davidson College  
March 2009 Walter M. Patterson, III, Lander University  
March 2010 Ray E. Collings, Georgia Perimeter College  
March 2011 Ellen Kirkman, Wake Forest University  
March 2012 Charlotte Knotts-Zides, Winthrop University



## CALL FOR NOMINATIONS FOR THE MAA-SE AWARD FOR DISTINGUISHED TEACHING BY A BEGINNING COLLEGE OR UNIVERSITY MATHEMATICS FACULTY MEMBER

### COMPLETE NOMINATION PROCESS

**Brief Description:** The MAA Southeastern Section (MAASE) established this award to honor beginning college or university faculty whose teaching in the Section has been extraordinarily successful and whose effectiveness in teaching undergraduate mathematics is shown to have influence beyond their own classrooms. An awardee must have taught full time in a mathematical science in the Southeastern Section for at least two years, but not more than a total of seven years in any collegiate institution. Each year at most one college or university teacher is to be honored with this MAASE section award. Nominations for the award may be made by any member of the MAASE section.

A complete nomination packet should consist of a nomination form, a narrative, additional documentation, and letters of recommendation as described below. Please mail, fax or email the completed packet to arrive by Saturday, December 31, 2012 to:

Ron Taylor  
Department of Mathematics & Computer Science  
Berry College  
Mount Berry, GA 30149

Questions may be directed to Ron at [rtaylor@berry.edu](mailto:rtaylor@berry.edu) or at 706-290-2677.

#### **Eligibility and Guidelines for Nomination**

##### **Eligibility**

Teaching is intended to include classroom instruction as well as activities outside the classroom, such as working with student groups, preparing students for mathematical competitions, directing undergraduate students in research in mathematics, directing students in the preparation of honors theses, preparing teaching materials used by others, etc.

Nominees must:

- Hold the terminal degree required by SACS to be a full time faculty member in a collegiate institution,
- Be college or university teachers currently in the MAA-SE who have taught full time in a mathematical science in the Southeastern Section for at least two years, but not more than a total of seven years in any collegiate institution (In determining eligibility, we do not count time spent in a postdoctoral position where nearly all the nominee's time was spent on research, and the nominee did very little or no teaching (e. g. three semester courses a year or less).), and
- Hold membership in the Mathematical Association of America

##### **Guidelines for nomination**

Nominees for the award may be made by any member of the MAA-SE section.

Nominees should:

- Be recognized as extraordinarily successful in their teaching
- Have effectiveness in teaching undergraduate mathematics that can be documented
- Have had influence in their teaching beyond their own classrooms



A nomination for this award should consist only of the materials requested below, and should not include any other materials, such as curricula vitae or other items. Please prepare all nomination materials on one side only of 8.5 by 11 inch paper, with a type size no smaller than 12 points (pica).

### **Nomination Packet:**

#### **Nomination Form**

A completed **Nomination Form** is the first part of the packet. Please see Page 26 of this newsletter for the nomination form.

#### **Narrative**

Please describe the nominee's extraordinary success in teaching by providing a narrative of the nominee's background, experience, teaching style, special contributions, other teaching awards, and any additional evidence of the nominee's unusual achievement in teaching. Note especially effectiveness in teaching undergraduate mathematics and influence beyond the nominee's own classrooms. The narrative should not exceed five double-spaced pages.

#### **Additional Documentation**

Please submit no more than three pages of further evidence to document the nominee's extraordinary teaching success. This documentation will vary greatly from institution to institution, but may include summaries of peer or student evaluations, comments on teaching, possible increases in numbers of majors in mathematics (with clear evidence of the nominee's substantial responsibility for them), possible student success in mathematics competitions (with clear evidence of the nominee's substantial responsibility for them), success in research in mathematics conducted by undergraduate students under the direction of the nominee, production of superior quality honors theses by undergraduate students under the direction of the nominee, development of curricular materials successfully used by colleagues, adoption of the nominee's teaching methods or techniques by experienced colleagues, service as a respected adviser for a student group, etc.

Nominators should bear in mind that the selection committee might view a nomination more positively if it is accompanied not just by carefully chosen testimonials from a few selected students and faculty, but also by reports, comments and criticism which is representative of the whole spectrum of opinion among students and faculty on the nominee's teaching.

#### **Letters of Recommendation**

Please include no more than five letters of recommendation, as follows:

- Two letters from the nominee's present or former students.
- Two letters from the nominee's colleagues (one of whom could be the department chair).

One additional letter from any one qualified to comment on the nominee's extraordinary teaching success.



**MAASE Award for Distinguished Teaching by a Beginning College or University Mathematics Faculty Member**

**NOMINATION FORM**  
*To be submitted by December 31, 2012*

**PLEASE TYPE**

Nominee's Name (First name first):	
College or University Affiliation:	
College or University Address:	
Nominee's email address:	
Is the nominee a current member of the Mathematical Association of America? (only members of the MAA are eligible for the Award)	Year joined _____
Nominee's number of years teaching experience in a mathematical science (at least two years, not more than seven)	Number _____ Year _____ to Year _____
Graduate Degree earned in mathematical sciences:	Degree _____ Area of Specialty _____
List the years and where the nominee taught full time in a mathematical science in the Southeastern Section (at least two needed)	Years _____ Location _____

Please describe on no more than one page of 12 point type, double-spaced, the unusual personal and professional qualities of the nominee that contribute to his or her extraordinary teaching success, and attach.

Name of nominator (First name first):	
Address:	
Telephone:	
Email address:	
Signature:	
Date:	/ / /

## CALL FOR NOMINATIONS FOR THE 2012 SOUTHEASTERN SECTION DISTINGUISHED TEACHING AWARD

Nominations for the 2012 Southeastern Section Award for Distinguished College or University Teaching of Mathematics are now being accepted. The Southeastern Section selection committee will choose the winner of this award from the pool of nominees, and the winner will be honored at the Spring 2012 meeting of the Section at Clayton State University, Atlanta, GA. The winner will also be widely recognized and acknowledged within the Section and will be the Section's official candidate for one of the three Deborah and Franklin Tepper Haimo Awards for Distinguished College or University Teaching of Mathematics that will be presented in January 2013.

Nomination materials and a description of the complete nomination packet are included in this Newsletter. Each member of the Section is encouraged to consider submitting a nomination to **Martin Jones**, chair of the selection committee. If you wish to nominate someone, please submit a complete nomination packet by **December 1, 2012**. Nomination packets for persons nominated for the 2012 award may be carried forward for consideration for the 2013 award, if the nominator so desires. The selection committee will contact nominators to determine whether they wish to submit a revised nomination to the selection committee.

### **Previous Teaching Award Recipients:**

The section has presented the Award for Distinguished College or University Teaching of Mathematics each year since 1992. Past recipients are:

- 1992 Anne Hudson, Armstrong State University
- 1993 Robert Bryant, Duke University
- 1994 John Neff, Georgia Institute of Technology
- 1995 Sylvia Bozeman, Spelman College
- 1996 Carl Pomerance, University of Georgia
- 1997 Harold Reiter, Univ. of North Carolina at Charlotte
- 1998 Ben Klein, Davidson College
- 1999 Joel Brawley, Clemson University
- 2000 Theodore Shifrin, University of Georgia
- 2001 Johnny Henderson, Auburn University
- 2002 Ronald Harshbarger, Univ. of South Carolina, Beaufort
- 2003 Sue E. Goodman, University of North Carolina, Chapel Hill
- 2004 Jeff Knisley, East Tennessee State University
- 2005 David Stone, Georgia Southern University
- 2006 William "Mac" Priestly, the University of the South
- 2007 David Sumner, University of South Carolina, Columbia
- 2008 Ronald Gould, Emory University
- 2009 Hugh Howards, Wake Forest University
- 2010 Martin Jones, University of Charleston
- 2011 Barry Spieler, Birmingham-Southern College
- 2012 Sam Kaplan, University of North Carolina at Asheville

**Award for Distinguished College or University Teaching of Mathematics  
Nomination Form**

Please type.

Nominee's Name (first name first): \_\_\_\_\_

College or University Affiliation: \_\_\_\_\_

College or University Address: \_\_\_\_\_

City: State: ZIP: \_\_\_\_\_

Nominee's number of years teaching experience in a mathematical science: \_\_\_\_\_

Has the nominee taught at least half time in a mathematical science during the current academic year or during the previous year if on approved leave or sabbatical? \_\_\_\_

In the space below, please describe briefly the unusual personal and professional qualities of the nominee that contribute to his or her extraordinary teaching success.

Name of nominator (first name first): \_\_\_\_\_

Address of nominator: \_\_\_\_\_

Telephone: \_\_\_\_\_ Email: \_\_\_\_\_

Nominator's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**Ninety-second Annual Meeting**  
**Mathematical Association of America, Southeastern Section**  
**Winthrop University**  
**Friday – Saturday, March 15 - 16, 2013**

**Meeting Announcement:** The ninety-second annual meeting of the Southeastern Section of the Mathematical Association of America will be held on Friday and Saturday, March 15 - 16, 2013 at Winthrop University in Rock Hill, South Carolina. The Association invites all interested persons to participate and asks that department chairpersons, faculty, and members of the Section help in publicizing the meeting. Attendees may pre-register (and pay!) online through the meeting website at <http://sections.maa.org/southeastern/maase/conference/>. On-site registration will also be available. Up-to-date information about the conference (program, registration, accommodations, transportation, etc.) is maintained at the conference web site, which is also accessible through the Section web site <http://sections.maa.org/southeastern/maase/>.

**General Sessions:** There will be three general sessions, including four speakers:

- **Sam Kaplan**, UNC Asheville, 2012 Section Teaching Award Recipient and **Hua Wang**, Georgia Southern University, 2012 Section Teaching Award for Beginning Faculty Recipient
  - **Hugh Howards**, Wake Forest University, 2012-2013 Section Lecturer
  - **Rick Gillman**, Valparaiso University and MAA Chair of the Committee on Sections
- General sessions will be held in the DiGiorgio Campus Center.

**Short Courses and Workshops:** There are three excellent short courses/workshops on Friday morning for which there is a separate registration fee which can also be paid through the meeting website. These are:

- *The use of classroom response systems in teaching mathematics*, Shemsi Alhaddad (University of South Carolina Lancaster)
- *Calculus in Banach Spaces*, Jeffrey Ehme (Spelman College)
- *Risk Measures*, Wayne Tarrant (Wingate University)

For more detail, please see the conference website or Page 35 of this newsletter.

**Call For Contributed Papers:** The officers of the Section invite and encourage submission of titles and abstracts for fifteen-minute (20 minutes between the start of one talk to the start of the next) contributed papers in all areas of mathematics by college and university faculty, graduate students, undergraduates, and others. **Due to the growth in both student and professional papers, there will be contributed papers sessions and special sessions for undergraduates Friday morning.** With this expansion, we hope to better utilize the Friday morning time period for all attendees. Abstract submissions can be made through the meeting website beginning in December or by sending the information to the Program Chair (Pat Humphrey, [phum-phre@georgiasouthern.edu](mailto:phum-phre@georgiasouthern.edu)). Abstract submission deadline is **Monday, February 4, 2013**. It will be very helpful if individuals submit their information in advance of this deadline. Talks will be scheduled in concurrent sessions and organized, to the extent possible, by the general mathematical area indicated by the abstract.

Continued on page 35

# Student Activities

## MAA SE Section Meeting

### March 14-16, 2013



## Undergraduate Student Research Posters and Talks

Poster Session Saturday morning  
Talks throughout meeting

Present your research in a talk or with a poster. Abstracts for talks and posters can be submitted through the meeting web site. Prizes will be awarded for best talks and posters.

## Graduate School & Career Fair

### Friday noon

Is graduate school in your future? Need a job? Meet with representatives of graduate programs and employers.

- Pizza lunch (free for students)
- Networking
- Door prize raffle for students



## Distinguished Lectures for Students

### Friday morning

**Rick Gillman** (Valparaiso University)

“Global Warming and the Tragedy of the Commons”

**Harold Reiter** (UNC Charlotte)

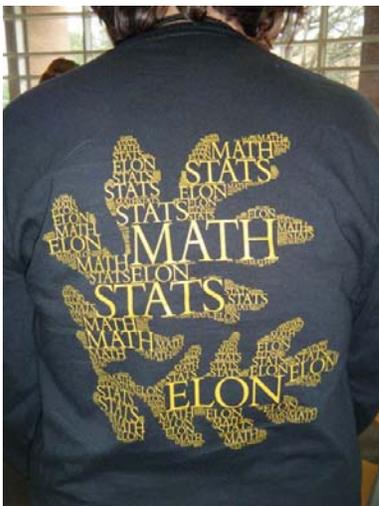
“Fusing Dots, Representations, and Dynamic One-Pile Nim”

## Math Jeopardy

Preliminary and  
semifinal rounds  
Friday morning

Finals Saturday noon

Teams of 3-4  
undergraduate students  
compete in this classic game, with clever questions (oops, answers) from  
calculus and other courses in the first two years of the mathematics curriculum.  
Register in advance by contacting Ron Taylor ([rtaylor@berry.edu](mailto:rtaylor@berry.edu))



## Math T-shirt Contest

Show off your geek chic. A prize will be awarded to  
the undergraduate math club or Jeopardy team with  
the best mathematically-themed T-shirt. All  
Jeopardy teams will be considered automatically.  
Other groups can register for the contest by  
contacting Laurie Heyer ([lahey@ davidson.edu](mailto:lahey@ davidson.edu)).

## Treasure Hunt

Thursday evening

Arrive early to the meeting for fun activities  
and mathematical puzzles. Meet students  
from all over the Southeastern Section of the  
MAA. Contact Julie Barnes  
([jbarnes@email.wcu.edu](mailto:jbarnes@email.wcu.edu)) to participate.



**Meeting Information (continued from page 28)**

There will also be several **special sessions** for selected mathematical areas:

- *Alternative assessments*
- *Inquiry-based Mathematics at all levels*
- *The mathematics of voting*
- *Statistics and Mathematics applied to Economics and Finance*
- *Teaching and learning via problems sections in journals*
- *Presentations by Beginning Faculty*<sup>TM</sup>

For more information on the special sessions, please see the conference website or Page 34 of this newsletter.

**Guidelines for Titles and Abstracts:** Abstracts are expected to deal with theory, application, teaching, history, or philosophy of mathematical sciences; they should indicate what the presenter intends to communicate in the allotted time. For multiple authors, the presenting author's name should be clearly designated; please identify undergraduate and graduate student presenters/authors. The use of special symbols should be considered judiciously; however, if an abstract includes LaTeX formatting, this can be rendered when compiling the abstracts for publication.

**Undergraduate Poster Session:** Students are encouraged to present research and results of special projects in poster format. The session is scheduled for Saturday morning, concurrent with contributed talks. Abstracts should be submitted through the meeting website no later than **Monday, February 1, 2012** to ensure that space will be available for your poster. Contact organizers Sarah Mason ([masonsk@wfu.edu](mailto:masonsk@wfu.edu)) or Catherine Matos (Clayton State, [cmatos@clayton.edu](mailto:cmatos@clayton.edu)) if you need additional information.

**Math Jeopardy Contest:** Teams of three or four undergraduates will compete in a mathematical version of the well-known answer-and-question game. Competition is limited. There is a \$25.00 registration fee for each team. *This fee can be paid with the sponsor's meeting registration.* Topics will include calculus (single and multi-variable), linear algebra, differential equations, and discrete mathematics. The preliminary rounds for Math Jeopardy will be scheduled on Friday morning from 8:00-12:00. To register team members so their names may be included in the program, or to find out more, contact Ron Taylor ([rtaylor@berry.edu](mailto:rtaylor@berry.edu)). *There is a limit of 36 teams; schools will initially be limited to one team. If fewer than 36 teams register by the deadline, schools may register additional teams.*

**Project NExT-SE:** Project NExT-SE (New Experiences in Teaching) is the Southeastern MAA Section's version of the national program for new and recent PhD's in mathematical sciences interested in improving the learning and teaching of undergraduate mathematics. All national and section Project NExT members are always invited to attend! Activities are planned for Thursday afternoon (beginning about 2:00 pm) and Friday morning. Contact Patrick Bahls ([pbahls@unca.edu](mailto:pbahls@unca.edu)), Ron Taylor ([rtaylor@berry.edu](mailto:rtaylor@berry.edu)), or Karen O'Hara ([kohara@highpoint.edu](mailto:kohara@highpoint.edu)) for more information.

**Treasure Hunt:** On Thursday evening (March 14), there will be a Mathematics Treasure Hunt for students and their advisors. Students will use mathematics to solve clues and look for a “treasure.” This is a fun, non-competitive event that will give students an opportunity to meet and work with students from other colleges and universities. It is also greatly appreciated if math club advisors would be willing to help at this event. If you have any questions or would like to volunteer to help, please contact Julia Barnes ([jbarnes@email.wcu.edu](mailto:jbarnes@email.wcu.edu)). Check-in is between 7:00pm and 7:30pm in the lobby of the DiGiorgio Campus Center with the event starting at 7:30pm.

**Graduate School and Career Fair:** In this venue, students considering graduate school in mathematical sciences have opportunities to meet with representatives of various graduate programs. In addition, those seeking jobs in industry, business or government in the mathematical sciences can meet with potential employers. Faculty mentors are also welcome. Pizza will be served free to students, and a raffle will be held for students visiting the exhibits. Representatives of graduate programs should contact Laurie Heyer ([lahey@davidson.edu](mailto:lahey@ davidson.edu)) for more information, if needed. The \$25 table fee can be paid with conference registration through the website.

**Math T-shirt Contest:**

The best mathematics T-shirt at the meeting will be recognized with an announcement, a certificate, and a featured picture in the fall newsletter. Get your Math Club organized now for a great T-shirt in the spring.

**Chairpersons’ Meeting and Liaisons’ Luncheon:** The Chairpersons’ meeting, scheduled for Saturday morning, is an opportunity for discussion of issues confronting the departments. Jeff Knisley ([knisleyj@mail.etsu.edu](mailto:knisleyj@mail.etsu.edu)) will convene the Chairpersons. MAA Liaisons will meet at lunch time on Friday, convened by Section Governor Martha Abell ([martha@georgiasouthern.edu](mailto:martha@georgiasouthern.edu)). A box lunch will be provided for those liaisons attending. Please e-mail Trent Kull ([kullt@winthrop.edu](mailto:kullt@winthrop.edu)) by February 15 if you are planning on attending.

**Exhibits:** On Friday afternoon and Saturday morning, representatives of publishing companies and other vendors will have exhibits in the lobby of the DiGiorgio Campus Center.

**Friday Evening Events:** Tickets (approximately \$25) for the conference dinner will be available for purchase at the time of online registration. Following the banquet, there will be various activities in the Campus Center, including a double feature presentation of the movies

Flatland: The Movie (2007)

&

Flatland 2: Sphereland (2012)

by Flat World Productions, LLC. Each feature is approximately 30 minutes long. No tickets are needed for these special showings, but viewing is limited to the 224 seat capacity of the Campus Center theater.

**Pre-Registration:** Pre-registration for the meeting through the conference website <http://sections.maa.org/southeastern/maase/conference/> is encouraged; on-site registration and materials pick up will be available at the main entrance on the west side of the DiGiorgio Campus

Center Thursday 2:00 - 3:30 PM and 6:15 - 8:30 PM; Friday 7:00 AM - 5:00 PM; and Saturday 7:30 - 10:30 AM.

<b>Fees</b>	<b>Pre-registered</b>	<b>After March 1</b>
Faculty meeting registration	\$25	\$35
College/university students, emeritus faculty	\$15	\$15
High school teachers	\$15	\$20
High school students	free	free
Conference Dinner	\$25 (approx.)	
Short Courses	\$35	

**Hotel Information:** For more current hotel information, please check out the information posted at <http://sections.maa.org/southeastern/maase/conference/>. Participants should make their own arrangements directly with a hotel of their choice and be sure to mention that you will be attending MAA-SE. Rooms are blocked in hotels listed below, all within 10 - 15 minute drive of the campus for Thursday, Friday and Saturday, March 14-16. Reservations deadline varies with hotel as noted below.

<b>Hotel Name</b>	<b>General location</b>	<b>Cost per night</b>	<b>Reserve by...</b>
Comfort Suites Rock Hill	Near I77, Exit 79*	\$99	February 14
Hampton Inn	Near I77, Exit 79	\$99	February 21
Hilton Garden Inn	Near I77, Exit 79	\$95	February 14
TownePlace Suites by Marriott	Near I77, Exit 79	\$89	February 21
Holiday Inn	Near I77, Exit 79	\$94	February 28
Wingate by Wyndham	Near I77, Exit 79	\$80	February 14
Quality Inn & Suites	Cherry Road**	\$54	February 14
Courtyard Rock Hill	Cherry Road	\$98	February 14
Super 8 Rock Hill	Cherry Road	\$59	February 14

\* About a 15 minute drive from campus

\*\*About a 10 minute drive from campus

**Transportation and Directions**

The conference will take place at Winthrop University, off I-77, about 40 miles of Charlotte. Winthrop is less than an hour from the Charlotte airport for anyone considering flying to the conference.

**Updates:** Updates to this announcement and ultimately a tentative schedule of talks will appear on the conference web page, which is accessible through the section web page.

**2013 Section Meeting Special Sessions***Alternative Assessments*

Organizer: Eleanor Abernethy, University of Tennessee, Knoxville

This Special Session will focus on creative and effective assessments used in math classrooms. Anything other than the traditional (i.e. quizzes, tests, etc.) type of assessment will be considered such as portfolios, peer review, and “minute papers.”

*Inquiry-Based Mathematics at All Levels*

Organizers: John Mayer and Bernadette Mullins, Birmingham Southern College

Special Session Description:

This session will include talks about implementation of, and research on, inquiry-based mathematics K-20. Talks may include descriptions of the nuts and bolts of how to successfully implement inquiry-based instruction and/or research studies on the impact of inquiry-based instruction.

*The Mathematics of voting*

Organizer: Jason Parsley, Wake Forest University

The theory behind voting is heavily rooted in mathematics and is a lively area of current research which draws upon areas including combinatorics and geometry. This session will, in particular, include talks on weighted voting, in which different voters have different weights and play different roles.

*Statistics applied to Economics and Finance*

Organizer: Wayne Tarrant, Wingate University

With worldwide financial sectors crumbling, more people have started to take notice of the subject of economics. Statistics can inform consumers and decision makers, but mathematicians have stayed away from these questions in droves, leading the economists to (sometimes very poorly) recreate the wheel. Finally mathematicians are starting to look at issues in this area. I hope that this set of talks will encourage more mathematicians and math students to consider looking at an area in which many interesting questions can be answered by sometimes simple statistical tools.

*Teaching and Learning via Problems Sections in Journals*

Organizers: Brian Beasley, Presbyterian College and David Stone, Georgia Southern University

What is the role of problem solving in the mathematical enterprise? In particular, how do the problems sections in various mathematical journals contribute to the development of class examples and research projects for instructors and students? We invite presentations that feature interesting problems and solutions, faculty and/or student research resulting from generalizations of journal problems, and pedagogical uses of problems in the classroom. As part of the discussion of this topic, we plan to survey editors of different problems sections to get their views on the value of problems sections and to discover the criteria they use in soliciting and selecting problems.

*Presentations by Beginning Faculty™*

Organizer: Ron Taylor, Berry College

As always, we reserve a special forum for those new to the section, especially those in the beginning stages of their careers. This is an opportunity for the “older” section members to meet new folks and for the new ones to get acquainted with each other!

## 2013 Section Meeting Short Courses

### *The use of classroom response systems in teaching Mathematics*

Shemsi Alhaddad, University of South Carolina Lancaster

A classroom response system is a tool used to engage students in learning. There are many options available to instructors. Some systems are free; others can be bundled with textbooks. Some require special equipment; others can be used with students' laptops or phones. In this short course I will start with a comparison of different types of classroom response systems. I will then discuss my experience using a particular system, the Ubiquitous Presenter, going over advantages and limitations of the technology, pedagogical benefits and drawbacks of using this and similar systems, and student feedback on their experience.

Following the discussion, the course will become hands-on. The participants will gain experience using a few select classroom response systems, taking turns playing the roles of instructor and student. By the end of the course, participants will have sufficient knowledge to start using classroom response systems to effectively engage their students.

### *Calculus in Banach Spaces*

Jeffrey Ehme, Spelman College

Calculus in Banach Spaces naturally generalizes ordinary differential and integral calculus to infinite dimensional settings. It has many applications in differential equations, functional analysis, and physics. For this short course, we begin with examples of Banach spaces and show how differentiation is defined in this setting. This involves a discussion of tangent spaces and continuous linear functions and works up to the Implicit Function Theorem. We illustrate these ideas by showing how the Calculus of Variations is related to this topic and how some standard questions in differential equations can be answered in a straight forward manner using this calculus. Along the way, we continually compare and contrast calculus in the Banach setting with the ordinary calculus and give ideas for undergraduate research projects.

### *Risk Measures*

Wayne Tarrant, Assistant Professor of Mathematics, Wingate University

Risk is a daily occurrence, from crossing the street safely to choosing the allocation of funds in retirement accounts to deciding whether to prepare for the zombie apocalypse. Many people only consider vague ideas of probabilities when they make decisions about risky situations. Mathematicians can and should do better.

With the recent books of Nassim Taleb, more people are beginning to think about events that have small probability, i.e. those events that fall someplace in the tail of a probability distribution. The show "Doomsday Preppers" and the fascination with the Mayan calendar demonstrate this phenomenon. Risk measures attempt to quantify just how bad it will be when a bad event occurs and should be useful to the general public in making decisions.

This course will be mostly self-contained, but it would be good if participants had a working knowledge of probability distributions. While most textbooks in the area of risk measures are at the advanced graduate level, even college freshmen can handle the concepts. This is a topic that could be discussed with basic math for liberal arts classes, given to upper level undergraduates, or pursued in great depth by doctoral students or faculty.

This short course will be conducted in an inquiry style, so come prepared for dialogue.

## **SOUTHEASTERN SECTION OFFICERS 2012-2013**

<b>Chair:</b>	Jeff Knisley (East Tennessee State University) <a href="mailto:knisleyi@etsu.edu">knisleyi@etsu.edu</a>
<b>Chair-Elect:</b>	Queen Harris (Georgia Perimeter College) <a href="mailto:Queen.Harris@gpc.edu">Queen.Harris@gpc.edu</a>
<b>Vice-Chair For Two-Year Colleges:</b>	Larry Bouldin (Roane State Community College) <a href="mailto:bouldincl@roanestate.edu">bouldincl@roanestate.edu</a>
<b>Secretary-Treasurer:</b>	Emily Hynds (Samford University) <a href="mailto:eahynds@samford.edu">eahynds@samford.edu</a>
<b>Section Governor:</b>	Martha Abell (Georgia Southern University) <a href="mailto:martha@georgiasouthern.edu">martha@georgiasouthern.edu</a>
<b>Section Lecturer:</b>	Hugh Howards (Wake Forest University) <a href="mailto:howards@wfu.edu">howards@wfu.edu</a>
<b>Newsletter Editor:</b>	Sarah Raynor (Wake Forest University) <a href="mailto:raynorsg@wfu.edu">raynorsg@wfu.edu</a>
<b>Program Chair:</b>	Pat Humphrey (Georgia Southern University) <a href="mailto:phumphre@georgiasouthern.edu">phumphre@georgiasouthern.edu</a>
<b>Student Activities Coordinator:</b>	Laurie Heyer (Davidson College) <a href="mailto:lahey@clayton.edu">lahey@clayton.edu</a>
<b>Beginning Faculty Coordinator:</b>	Ron Taylor (Berry College) <a href="mailto:rtaylor@berry.edu">rtaylor@berry.edu</a>
<b>State Director of Alabama:</b>	David Dempsey (Jacksonville State University) <a href="mailto:ddempsey@jsu.edu">ddempsey@jsu.edu</a>
<b>State Director of Georgia:</b>	Catherine Matos (Clayton State University) <a href="mailto:CatherineMatos@clayton.edu">CatherineMatos@clayton.edu</a>
<b>State Director of North Carolina:</b>	Patrick Bahls (University of North Carolina, Asheville) <a href="mailto:patrick.bahls@gmail.com">patrick.bahls@gmail.com</a>
<b>State Director of South Carolina:</b>	Jim Solazzo (Coastal Carolina University) <a href="mailto:jsolazzo@coastal.edu">jsolazzo@coastal.edu</a>
<b>State Director of Tennessee:</b>	Andy Miller (Belmont University) <a href="mailto:andrew.miller@belmont.edu">andrew.miller@belmont.edu</a>
<b>Webmaster:</b>	Jim Gleason (The University of Alabama) <a href="mailto:jgleason@as.ua.edu">jgleason@as.ua.edu</a>
<b>Historian:</b>	Virginia Watson (Kennesaw State University) <a href="mailto:vwatson@kennesaw.edu">vwatson@kennesaw.edu</a>
<b>Directors of Project NeXt-SE:</b>	Patrick Bahls (University of North Carolina, Asheville), Karen O'Hara (High Point University), and Ron Taylor (Berry College) <a href="mailto:pbahls@unca.edu">pbahls@unca.edu</a> , <a href="mailto:kohara@highpoint.edu">kohara@highpoint.edu</a> , <a href="mailto:rtaylor@berry.edu">rtaylor@berry.edu</a> (respectively)

## **MAA SOUTHEASTERN SECTION COMMITTEES** **2012-2013**

<b>Newsletter:</b>	Sarah Raynor (Chair) Kristen Abernathy
<b>Section Teaching Award:</b>	Martin Jones (Chair) Barry Spieler Sam Kaplan State Directors
<b>Section Service Award:</b>	Ray Collings (Chair) Ellen Kirkman Charlotte Knotts-Zides
<b>Nominations:</b>	Ellen Kirkman (Chair) Jim Gleason Pat Humphrey Jeff Knisley Antara Mukherjee
<b>Site Organizer (Winthrop):</b>	<b>Joseph Rusinko</b> <b>Trent Kull</b>

**Southeastern Section MAA Website**  
**<http://sections.maa.org/southeastern/maase/>**