

ALLEGHENY MOUNTAIN SECTION NEWSLETTER

VOLUME XXVII, NUMBER 1 February, 2004 J. Lyn Miller, EDITOR

Please share this newsletter with colleagues, and encourage them to join MAA. If you have received a copy as a department chair, please place it where it will be accessible to your faculty.

Governor's Corner Don Platte, Mercyhurst College

By the time you read this, the New Year will be well under way, but Happy New Year. The Board of Governors meeting in Phoenix was an interesting all-day affair, with the typical approval of minutes, reports from officers, staff, editors, and committees, announcement of prizewinners, and new business. Most of the prizewinners were made public in the February issue of Focus. I always find the controversial issues a welcome break from the routine of the meeting. One such issue was a joint position paper from the MAA and NCTM on teaching calculus in secondary school. The theme of the position paper was that if you do teach calculus in secondary school, the students should be adequately prepared mathematically and the course should be equivalent to college course. This may seem like a great idea, but trying to write the position in a way that is acceptable to all is difficult.

It was great to see so many members of the section at the Joint Meeting. Of course, it appeared that most of us were there to interview candidates for mathematics positions. Our department is also looking to fill a position. From the stack of applicants we received it appears there are many outstanding candidates available. I wish everyone good luck in this endeavor. Bring your new faculty member to next year's section meeting! See you all at the spring meeting on March 26-27 at West Virginia Wesleyan College.

Message from the Chair Tamara Lakins, Allegheny College

Greetings from a snowy and cold Meadville! The Executive Committee and local coordinator Mike Berry are busy preparing for the annual spring section meeting, to be held at West Virginia Wesleyan College on March 26-27, 2004. The program is an exciting one, including invited speakers Ed Burger (Williams College), Dan Maki (Indiana University), and our own Michael Botsko (Saint Vincent College), winner of the 2003 Allegheny Mountain Section Award for Distinguished Teaching. In addition, we are planning the usual contributed paper sessions for faculty and student speakers, a Friday night pizza party. a breakout session on student competitions, the spring Section NExT activities, and an MAA Workshop on *Mathematics for* Business Decisions. Details on the workshop and other information about the meeting (with a special welcome to new MAA members, or MAA members new to the Allegheny Mountain Section) can be found in this newsletter.

One of the items on the agenda of the Fall Section Officers' meeting last October was a

discussion of the section bylaws, which have not been updated since 1999. As a result of this discussion, the Executive Committee is suggesting changes to our bylaws. Details on these changes, which will be voted on at the Business Meeting on Saturday, March 27, are also included in this newsletter.

Don't forget to check the section website for information about our section awards, Section NExT, and the spring section meeting at

http://www.math.psu.edu/sellersj/allegheny

<u>mtn/</u>. As always, if you have any suggestions regarding the activities and annual meetings of the section, please contact any section officer. I look forward to seeing many of you in March at West Virginia Wesleyan!

Welcome to New Members

The Executive Committee would like to extend a special invitation to all new MAA members and all members of the MAA new to the Allegheny Mountain Section to attend the Spring 2004 section meeting. As our welcome to you, we will waive your registration fee for this meeting! Please refer to the meeting registration form (available in this newsletter and on the section website) to see how to take advantage of this offer.

Summer Short Course

Ron Harrell, Allegheny College

The speaker for our Summer Short Course next summer is Gene Herman of Grinnell College, Iowa, and the course is *Teaching Linear Algebra with Computers*.

Linear algebra became a mainstream undergraduate course only after the computer revolution transformed the discipline into one that provides indispensable tools for the sciences. In this short course, we will experiment with a wide range of techniques to exploit the connection between computing and linear algebra in order to enhance student learning. We will see how to help students build stronger intuition and develop deeper understanding of linear algebra, how to stimulate their interest and encourage their active engagement in the study of the subject, and how to incorporate more recent developments in the discipline. We will use the major mathematical software packages Maple, Mathematica, and Matlab, making extensive use of their strengths in symbolic and numeric computation and in dynamic visualization.

This is a version of the minicourse that Dr. Herman and two colleagues have offered at the Joint Meetings for the past two years. The software that he is using will be available on all machines for the course.

The dates are June 14-17, 2004; the place is Allegheny College. The registration fee is \$250, and the room and board fee is \$150. A registration form and more detailed information about the course, such as the daily schedule of topics, can be found at the section's website:

<u>http://www.math.psu.edu/sellersj/allegheny</u> <u>mtn/</u>. If there are any questions, please contact Ron Harrell at 814-332-5344 or by email (<u>rharrell@allegheny.edu</u>).

Changes in the Section Bylaws

Tamara Lakins, Allegheny College

The Executive Committee brings to the Section proposed changes in our bylaws, the most significant of which is a proposal to split the office of Secretary-Treasurer into two separate offices. Other changes we propose are some modification of the language of the bylaws, to bring them in line practice, with current and explicit descriptions of the appointed offices of Coordinator of Section NExT and Director of e-Communication. These latter offices have been added over the last several years, but the section bylaws were never modified to reflect these changes.

A vote on the proposed changes to the bylaws will held during the spring meeting at the Saturday morning Business Meeting on March 27. Our current bylaws indicate that when a revision of the bylaws is proposed, that revision must be submitted in writing to every member of the section at least fifteen days prior to the meeting at which the vote will take place. Consequently, the proposed new version of the bylaws is included with this newsletter. You can find the current version of the bylaws, as well as the current version marked with changes for comparison purposes, on the section webpage at http://www.math.psu.edu/sellersj/allegheny mtn/ . The changes occur in Article III.

If the new bylaws are voted as acceptable by the section membership, then they must be submitted to the Committee on Sections for its recommendation to the Board of Governors. Assuming that the new bylaws are accepted by both the section membership and the Board of Governors, the split of the office of Secretary-Treasurer (which is on this year's ballot) into two separate offices will be accomplished by the following transition: The person who is elected Secretary-Treasurer at this year's election will serve as Secretary-Treasurer during 2004-2005 and then become the Treasurer after the Spring 2005 election of new officers, at which a new Secretary will be elected. The Executive Committee wishes to encourage anyone who is interested in running for Secretary in Spring 2005 to contact and work closely over the next year with Ben Freed, the current Secretary-Treasurer, in order to learn what the position entails.

Report from the Nominating Committee Bud Boman, PSU-Dubois

The Nominating Committee (Bud Boman, Tami Lakins, and John Thompson) will be nominating the following individuals for the positions indicated. We would like to thank all of the MAA members who suggested possible candidates during the past couple of months. Also we remind all section members that nominations can still be made from the floor during the business meeting at the spring meeting. Brief biographies of the candidates below will be posted on the section website prior to the spring meeting.

Chair-Elect:

John Bukowski, Juniata College Mike Berry, WV Wesleyan University <u>Secretary/Treasurer:</u> Ben Freed, Clarion University

Director of Short Courses: Ron Harrell, Allegheny College

Second Vice Chair:

Robert Fliess, West Liberty State University John Lattanzio, Indiana University of PA David Handron, Carnegie Mellon University Thomas Metzger, University of Pittsburgh

Section NexT News John Bukowski, Juniata College

The Section, with support from the national MAA and the Exxon Mobil Educational Foundation, sponsors sessions for our Section NExT Fellows twice each year. After a very interesting fall workshop on mathematical biology, we are excited about the program at this year's spring meeting. Section NExT is very fortunate to have Ed Burger doing double duty – in addition to presenting an invited address, he will lead NExT workshop on "Making our mathematics exciting and important to nonscience students." As one can read in his biography in this newsletter, Dr. Burger is truly an outstanding mathematician and teacher, and he is sure to give an inspiring presentation at the workshop. Dr. Burger is no stranger to Project NExT, as he has participated in activities of the national NExT organization. We hope that all NExT Fellows and consultants will be able to gather for this workshop as well as other informal discussions

A new class of Section NExT Fellows will begin their participation at the spring meeting. Although the application deadline has passed, we welcome further applications to be submitted by March 1. Partial funding for the meeting may be available to new Fellows. Information and forms can be found at the Section NExT web site, http://webpub.alleg.edu/employee/t/tlakins/a lleghenymtnnext/. Any questions about the Section NExT program should be directed to Barbara Faires (<u>faires@westminster.edu</u>) or John Bukowski (<u>bukowski@juniata.edu</u>). The Section NExT program begins at 1:30 pm on Friday, March 26, with a late lunch. Ed Burger's talk is scheduled for 2:30 pm.

News from the Campuses (carried over from Fall)

Clarion University Ben Freed

This year we have hired a number of temporary faculty, seven in all. Teaching full time for the year are Doug Best, Vivian Camerlengo, and Ramendra Bose; parttimers are Jim Bush, Bill Aaron, Dennis Kinol, and Tim LaVan. Within the last year we had three retirements. Sally Ringland and Glenn Rock retired last May. Sally spent her entire teaching career at Clarion, beginning in 1967. Glenn, who taught at Lafayette College and Salisbury State College before coming to Clarion, had been here since 1986. Roger Engle just retired in January. Roger, like Sally, spent his entire career teaching at Clarion and had also begun here in 1967. The department knew all three were irreplaceable; unfortunately, so did the administration, because, as of this writing, we have not been able to replace any of them with tenure-track faculty.

Three faculty members were promoted this year. Melanie Parker was promoted to Full Professor, Jon Beal was promoted to Associate Professor, and Beth Jackson was promoted to Assistant Professor.

Mike McConnell was elected President of the Association of Mathematics Teachers of Northwest Pennsylvania (AMTONP), and Karen Bolinger was elected President of the State System of Higher Education Mathematics Organization (SSHEMA). Karen has also been actively involved in grading the AP Calculus exams and judging for COMAP's Mathematical Contest in Modeling. Mike McConnell also participated in the grading of the AP Calculus exams last summer.

Jim Reynolds made a presentation at the ICTCM meeting held last fall. At the recent Joint Meetings in Phoenix, Karen Bolinger organized a session on Environmental

Mathematics. while Elaine Carbone presented a talk entitled, "A Monte Carlo Simulation: Geometric Probability and the Law of Large Numbers." Elaine was also a successful grant writer this past year; she was awarded a \$2,000 PT3 grant and a \$13,838.80 CETP-PA grant. Melanie Parker had an article entitled "Reasoning and Working Proportionally" appear in the February 2004 issue of the NCTM journal Mathematics Teaching in the Middle School. Jon Beal coordinated a Summer Academy in Industrial Mathematics for high school students last summer.

Finally, within the M.Ed. degree, a Secondary Mathematics Concentration was approved and is now officially on the books.

MAA Book Sale

Ben Freed, Clarion University

Once again our section will sponsor an MAA Book Sale at the annual meeting. Prices at the meeting are 20% below the MAA members' price. Cash, checks, and credit cards (Visa or MC) are accepted. You may purchase display copies or order items (free shipping). In addition, our section receives from national MAA headquarters a 10% rebate on all sales. So everyone benefits when you buy at the meeting.

This year, for the first time, we will also have MAA merchandise for sale. Items include icosahedron stress relievers, pens, note clips, lanyards, embroidered t-shirts, visors, tote bags, travel mugs, and umbrellas.

Preliminary Schedule for the Spring Section Meeting

Friday, March 26

- 11:30-12:30 Section officers meeting
- 1:00-3:30 Section NExT, lunch
- 1:00-5:00 Registration
- 2:00-6:00 Book exhibits
- 4:00-5:00 Invited address Dan Maki,

	Indiana University
5:00-5:30	Social time
5:30-6:30	Dinner
6:45-8:45	MBD Workshop
7:30-8:30	Breakout session on modeling
	contest
8:50-9:50	Student talks
9:45 -??	Pizza party

Saturday, March 27

- 7:30-8:45 Breakfast
- 8:00-8:45 Business meeting
- 8:00-9:00 Registration
- 9:00-12:00 Book exhibit
- 9:00-10:00 Invited address Michael Botsko, Saint Vincent College
- 10:15-11:15 Faculty talks
- 11:30-12:30 Invited address Ed Burger, Williams College
- 12:30 -?? Lunch

Breakout Session on the Mathematical Contest in Modeling

This year's breakout session at the Section meeting will feature panelists who have judged, coached, or competed in this international contest. Refer to the section website for more details as they develop.

Mathematics for Business Decisions MAA Workshop

Presented by <u>Richard Thompson</u> (University of Arizona), this workshop will be held at the spring meeting from 6:45pm to 8:45pm on Friday, March 26. There is no cost for this workshop, but there is a limit of 30 participants. Additional information about the text can be found at

http://business.math.arizona.edu/MBD/mbd. html .

Abstract: After five years of development, and testing by thousands of students, the Mathematical Association of America has published the electronic texts *Mathematics* for Business Decisions, Parts 1 and 2. These are distributed as boxed software. with installation CDs and Student Notebooks. Jointly written bv а mathematician and a professor of finance, these e-texts feature four interdisciplinary,

multimedia projects for lower division students business in and public administration. The two-course sequence, including probability, simulation, calculus, and optimization, is designed to replace the combination traditional of finite mathematics and brief calculus. We will demonstrate the new materials, discuss the challenges and rewards of teaching the program, and allow plenty of time for handson computer experimentation with the texts.

Invited Speakers for the Spring Section Meeting

<u>Michael W. Botsko,</u> Saint Vincent College

"On derivatives"

<u>Abstract</u>: This presentation will consider various properties of derivatives, functions related to derivatives, products of derivatives, reasons why derivatives are difficult to characterize, and finally a discussion of a controversial characterization of this interesting set of functions.

My interest in real analysis Biography: began when I took Mr. Dan DeFelice's Advanced Calculus course as an undergraduate mathematics major at Duquesne University. This interest continued on the graduate level as I studied in this area and in topology under Dr. Bob McDermott at Duquesne University. At the University of Pittsburgh, where I earned my doctorate, I took some exciting courses taught by Professor J. Nagata, which only served to enhance my love for this area of mathematics. Actually, my main academic interest lies in the teaching of mathematics, but I have also published in The American Mathematical Monthly, *Mathematics* Magazine, and The Real Analysis Exchange. Although I thoroughly enjoy teaching and studying mathematics, my real love in life goes to my family: my wife of many years Donna, my daughter Tanya, and our recent and beautiful granddaughter Kaiya.

(Michael was also the recipient of the 2003 Allegheny Mountain Section Award for Distinguished College or University Teaching of Mathematics.)

Edward B. Burger, Williams College

"How to Always Win at Limbo" or

"You can sum some of the series some of the time, and some of the series none of the time... but can you sum some of the series ALL of the time?"

Abstract: Have you ever been with someone for a while and asked yourself: "How close are we?" This presentation will answer that question by answering: What does it mean for two things to be close to one another? We'll take a strange look at infinite series, dare to mention a calculus student's fantasy, and momentarily consider transcendental meditation. In fact, we'll even attempt to build some very exotic series that can be used if you ever have to flee the country in a hurry: we'll either succeed or fail ... you'll have to come to the talk to find out. Will you be at the edge of your seats? Perhaps, but if not, then you'll probably fall asleep and either way, after the talk, you'll feel refreshed. No matter what, you'll learn a sneaky way to always win at Limbo.

<u>Biography</u>: Edward Burger is Chair and Professor of Mathematics at Williams College. His research interests are in number theory, and he is the author of over 25 research articles and two books – "The Heart of Mathematics: An invitation to effective thinking" (winner of a 2001 Robert W. Hamilton Book Award), and "Exploring the Number Jungle: A journey into diophantine analysis" (published by the AMS). Springer-Verlag will soon publish his third book, "Making Transcendence Transparent: An intuitive approach to classical transcendental number theory."

Burger was awarded the 2000 Northeastern Section of the MAA Award for Distinguished Teaching and 2001 MAA Deborah and Franklin Tepper Haimo National Award for Distinguished College or University Teaching of Mathematics. In 2002-2003 he was the Ulam Visiting Professor at the University of Colorado at Boulder, where he was awarded the 2003 Residence Life Teaching Award. Burger is an associate editor of the American Mathematical Monthly. The MAA named him the 2001-2003 Polya Lecturer. The MAA Board of Governors just awarded him the prestigious 2004 Chauvenet Prize.

Dan Maki, Indiana University

"What good are Hidden Markov Models (HMMs)?"

or

"How to help your computer pretend it can hear!"

<u>Abstract</u>: Hidden Markov Models have become an important tool in both speech recognition and in biology. In this talk we give the basics about HMMs and show how they are being used with great success in speech research and in genetics.

Biography: Daniel P. Maki is Professor of Mathematics at Indiana University, where he has been since receiving his Ph.D. from the University of Michigan in 1966. He has both teaching and research interests in the field of mathematical modeling. His teaching of math modeling is directed toward students in the social and life sciences and toward math students planning to work in industry. His research has special emphasis on digital signal processing and mathematical aspects of simulation. The digital signal processing is presently related to the study of algorithms for speech recognition by computer, and the simulation work is related to the study of queues and to algorithms for linear programming. Dr. Maki has participated in over one hundred interdisciplinary doctoral studies at Indiana University and has received numerous grants from NSF and NIH. He has also served two terms as Governor of the Indiana Section of the MAA, and he received the Distinguished Service Award of that Section. Dr. Maki currently serves as a member of the Audit and Budget Committee of the national MAA.

Directions to West Virginia Wesleyan College, Buckhannon, WV

Traveling north or south on I-79, take Exit 99. Then take US-33 East toward Buckhannon. The speed limit on I-79 is 70 miles per hour and on US-33 it is 65 miles per hour. It can be strictly enforced. When exiting I-79 coming south, use caution as the exit is just past the entrance. The Hampton Inn is located 10 miles later on the right.

On US-33, go through the first stop light past the Hampton Inn and take the second Buckhannon exit. It is marked 119/20, Buckhannon, Phillipi. Turn right at the bottom of the ramp, and then go through the stoplight and across the railroad track crossing. This road is a three-lane highway; the middle lane is a turn lane. The Centennial Motel is on the right.

At the stoplight past the Centennial Motel, turn left onto Main Street. You must be in the middle lane to turn left.

On Main Street, proceed through three stoplights. The Bi-Centennial Motel, now called the Main Street Inn, is on the left.

West Virginia Wesleyan College is located four blocks past the Main Street Inn.

Lodging Information

Buckhannon has a number of motels as well as bed-and-breakfasts that are affordable and welcoming for an overnight stay in the area when visiting Wesleyan's campus. The following locations can be found in the Buckhannon area. Note that blocks of rooms have been reserved at the first three locations.

Centennial Motel

22 North Locust Street, 304-472-4100

We have reserved all 23 of the rooms at the motel for the night of March 26. All the rooms have two full size beds and nonsmoking rooms are available. The special rate is \$55.00 + 9% tax. When calling, mention "MAA" to get this rate. Visa, MasterCard, Discover, American Express, and Diners Club are accepted. The rooms will be held until March 12. From the Centennial Motel, it is 0.8 miles to the Wesleyan Campus.

Hampton Inn

Rte. 33, 304-473-0900 or 1-800-HAMPTON

We have reserved a block of rooms at the Hampton Inn for the night of March 26. Some of the rooms are non-smoking with two queen-size beds while others are non-smoking with one king-size bed. All major credit cards are accepted. The special rate is 67.00 + 9% tax. If you call the toll free number to make a reservation, specify the Buckhannon, West Virginia, property. Be sure to use the group code "MAA" to get the above rate. The rooms will be held at this rate until March 12. From the Hampton Inn, it is 3.3 miles to the WVWC campus.

Main Street Inn/Bicentennial 90 East Main Street, 1-800-762-5137

<u>A Governor's Bed and Breakfast Inn</u> 76 East Main Street, 800-CALL-WVA

Baxa Hotel-Motel 21 North Kanawha Street, 800-356-5623

<u>Colonial Hotel-Motel</u> 24 North Kanawha Street, 800-209-8140

Deer Park Inn and Lodge Heavener Grove Road, 800-296-8430

Riverside Bed & Breakfast 113 Island Avenue, 304-472-0796

For a more extensive list of local lodging, see the online hotel/motel list for WVWC at http://www.wvwc.edu/about/motel.htm .

Allegheny Mountain Section Officers, 2003-2004

Bud Boman, Second Vice Chair (2003-2004), 814-375-4834,

ecb5@psu.edu

John Bukowski, First Vice Chair (2003-2004) and Section NExT Co-Coordinator (2003-2005), 814-641-3591,

bukowski@juniata.edu

Barbara Faires, Section NExT Co-Coordinator (2002-2004), 724-946-7293,

faires@westminster.edu

Ben Freed, Secretary-Treasurer (2002-2004), 814-393-1930,

freed@clarion.edu Ron Harrell, Short Course Co-Director (2002-2004), 814-332-5344, <u>rharrell@allegheny.edu</u> Tamara Lakins, Chair (2003-2005), 814-332-2957, <u>tlakins@allegheny.edu</u>

Lyn Miller, Newsletter Editor (2003-2005), 724-738-2878, <u>lyn.miller@sru.edu</u> Den Platta Gaverner (2003-2005) and Short

Don Platte, Governor (2003-2005) and Short Course Co-Director (2003-2005), 814-824-2378, platte@mercyhurst.edu James Sellers, Director of e-Communication (2002-2004), 814-865-7528, sellersj@math.psu.edu Gary Stoudt, Historian (2002-2004), 724-357-2608, gsstoudt@iup.edu Bob Vallin, Coordinator of Student Programs (2003-2005), 724-738-2856, robert.vallin@sru.edu John (Jun-Lue) Zhang, Past Chair (2003-2004), 724-357-4601, zhang@iup.edu

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By-Laws of the Allegheny Mountain Section of THE MATHEMATICAL ASSOCIATION OF AMERICA, INC.

Proposed changes to Article III

Article III.

Officers.

- The elected officers of the Section shall be Chair, Chair-Elect (when that office is filled), Past Chair (when that office is filled), First Vice-Chair, Second Vice-Chair, Treasurer, Secretary, Newsletter Editor, Director(s) of Short Courses, and Coordinator of the Student Program. The elected officers shall appoint the following officers: Section Historian, Director of e-Communications, and Coordinator(s) of Section NExT.
- 2. All officers of this Section must be members of the Mathematical Association of America, Inc. and of this Section.
- The Executive Committee shall consist of all elected officers of the Section and shall also include the Section Governor and the appointed officers as ex-officio members. Exofficio members of the Executive Committee have voting privileges at Executive Committee meetings.
- 4. The term of each officer shall be for two years, except for Chair-Elect, who holds office for one year. The Chair and Vice-Chair may not succeed themselves. The terms of the Treasurer, Secretary, Newsletter Editor, Director(s) of Short Courses, the Coordinator of the Student Program may be extended indefinitely by biennial reelection. The terms of the Section Historian, Director of e-Communications, and Coordinator(s) of Section NExT may be extended indefinitely by biennial reappointment by the Executive Committee. The elected officers shall assume their duties upon adjournment of the meeting at which they are elected. The past Chair shall serve for one year.
- 5. The Secretary, Coordinator of the Student Program, a Vice-Chair, a Director of Short Courses, and the Newsletter Editor shall be elected at the Spring Meeting held in odd numbered years. The Chair-Elect, a Vice-Chair, a Director of Short Courses (if necessary), and the Treasurer shall be elected at the Spring Meeting held in even numbered years. After serving one year the Chair-Elect becomes the Chair. After serving two years the Chair becomes the Past Chair.

- 6. The elected officers will be nominated by a committee appointed by the Chair. Additional nominations may be made by any member of the Section at the time of the election.
- 7. The Chair shall preside at all business meetings of the Section and all meetings of the Executive Committee. He or she shall have general charge and shall execute the affairs of the Section. He or she shall appoint all committees unless otherwise directed by the members at a meeting and he or she shall be an ex-officio member of all committees.
- 8. The Treasurer shall keep all the financial accounts and records of the Section. He or she shall receive all money paid into the Section and shall deposit such money in a bank to the account of the Section, taking regular receipt of deposit thereof. The Treasurer shall pay all bills of the Section out of the Section's funds and file the Annual Financial Report.
- 9. The Secretary shall keep all the books and membership records of the Section. He or she shall file the Annual National Report and keep minutes of all Business and Executive Committee meetings of the Section.
- 10. The Vice-Chair serving his or her second year shall be designated the First Vice-Chair and shall assume the duties of the Chair in the event the Chair is unable to serve. The Vice-Chair serving his or her first year shall be designated the Second Vice-Chair. The duties of the first vice-chair shall include making speakers' arrangement for the Section Spring Meeting; the duties of the second vice-chair shall include the coordination of contributed talks and making local arrangements with the host institute for the Section Spring Meeting.
- 11. The duties of the Chair-Elect and the Past Chair are to participate in the meetings of the Executive Committee for the purpose of maintaining continuity in the office of Chair of the Section.
- 12. The duties of the Newsletter Editor shall include publishing a newsletter to be sent to all members of the Section at least twice each academic year one in the Fall and one prior to the Spring Meeting.
- 13. The Coordinator of the Student Program is responsible for the student portion of the program at the Spring Meeting.
- 14. The duties of the Director(s) of Short Courses shall include the coordination of the summer short course and minicourse(s) which are offered by the Section.
- 15. The duties of the Section Historian shall include collating and preserving significant records that are central to the Section.
- 16. The duties of the Director of e-Communications shall include maintaining the section website and electronic registration for meetings, as well as coordinating electronic communication to members of the section.
- 17. The duties of the Coordinator(s) of Section NExT shall include recruiting members of Section NExT and organizing the Section NExT program.
- 18. The Executive Committee shall conduct the affairs of the Section between meetings, and it is empowered to fill any vacancy of an elected office (except Sectional Governor) until the next Spring Meeting, at which time the vacancy shall be filled by an election.

Abstract of Talk: (Please **attach** on a separate sheet.)

Special Equipment Needed:

(Each room is equipped with chalkboard, overhead projector, and screen. Computers, VCRs, etc., **may be** available with advanced notification, but this is not guaranteed. If such technology is requested, please also note other necessary information, such as software that may be needed, whether you need CD-R or ZIP drive capabilities, etc.)

For Students Only: As a student speaker, you receive a one-year membership to the MAA. We will have a form for you to complete at the meeting in order to finalize the process of obtaining this one-year membership.

Mail student Talk Information Forms	Mail faculty Talk Information Forms to:	
to:	Bud Boman	
Bob Vallin	Pennsylvania State University, Dubois	
Department of Mathematics	College Place	
Slippery Rock University	Dubois, PA 15801	
Slippery Rock, PA 16057		

Talk Information Forms must be received by March 19, 2004.

Allegheny Mountain Section Mathematical	Association of Am	erica
Annual Spring Meeting – Regist	ration Form	
(online at <u>http://www.math.psu.edu/sellersj/alleghenymtn/ar</u> ************************************	<u>nnual_meeting_2004/m</u>	<u>eetreg.htm</u>) ********
Name:		
Institution:		
Email Address:		
Mailing Address:		
Registration Category (check one): Faculty Member, 4-Year Institution (\$25.00) Faculty Member, 2-Year Institution (\$25.00) Business or Government Employee (\$25.00) Faculty Member, 4-Year Institution [new person] Faculty Member, 2-Year Institution [new person] Faculty Member, 2-Year Institution [new person] Business or Government Employee [new person] Business or Government Employee [new person] Undergraduate Student (\$0.00) Graduate Student (\$0.00)	(\$0.00) (\$0.00) (\$0.00)	
Optional Contribution to support Section NExT program:	yes (\$5.00)	no
Attending Minicourse? This course, planned for Friday just after dinner, will dea Decisions. There is no cost for this minicourse, but there	yes (\$0.00) l with Mathematics for is a limit of 30 partici	no or Business pants.
Friday Evening Dinner?	yes (\$16.00)	no
Saturday Breakfast?	yes (\$4.00)	no
Saturday Box Lunch?	yes (\$5.00)	no
MAA Member?	yes	no

Additional Information (such as whether you are bringing a guest to meals):

Checks should be made payable to *Allegheny Mountain Section, MAA*, and sent to: Ben Freed, Mathematics Department, Clarion University, Clarion, PA 16214. Registration Forms must be received by March 19, 2004.

J. Lyn Miller, Editor Allegheny Mountain Section, MAA Dept. of Mathematics Slippery Rock University Slippery Rock, PA 16057