



ALLEGHENY MOUNTAIN SECTION NEWSLETTER

VOLUME XXVIII, NUMBER 1

February, 2005

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 Report

Don Platte, Mercyhurst College

At the January Joint Meetings in Atlanta, I attended my last Governor's Board Meeting. Atlanta is a remarkable city, with CNN, Olympic Park, Martin Luther King Jr. National Historic site, the Atlanta Underground, and several sports arenas all within walking distance of the convention facilities. I was impressed by the hospitality of its people and thoroughly enjoyed my time as both tourist and mathematician.

Let me share a few summary facts from the trustee meeting. Currently, MAA's assets are worth approximately \$12.5 million dollars, and membership is at 25,960. In 2006, membership rates will increase \$2-\$7, depending on membership type. (There are four primary membership categories.) There are now nine different special interest groups in the MAA (SIGMAAS). You can see if one of these appeals to you by checking out the redesigned MAA web site, which also has links to professional development opportunities, MathDL, and our section's web site.

As Governor, I have become keenly aware of the many MAA members who volunteer their services to help the organization succeed at both the national and sectional

levels. I do not believe that the credit or compensation that these members receive is proportionate with the time and effort they so selflessly donate. Past and current officers of our section have spent countless hours on preparation and organization to make our spring meeting a success, and many from our section also serve on national committees. I am grateful to all for their work, and I encourage other members of our section to consider running for office or volunteering for committee service at either the local or national level. Let an officer know of your interest.

My term of office is over June 30, 2005, and the process of electing a new governor should be under way as you read this. I thank you all for allowing me to serve you as governor. The board meetings, while not always exciting, have allowed me to visit different parts of the country, to re-connect with old friends, and to meet numerous devoted and interesting mathematicians. Most exciting to me, however, has been the opportunity to represent a vibrant and dedicated section of the MAA.

I hope to see you all at the spring meeting at Slippery Rock University.

Message from the Chair

Tamara Lakins, Allegheny College

I hope you've all marked your calendars for the spring section meeting at Slippery Rock University on April 1-2! As announced in last semester's newsletter, the invited speakers are Brent Morris (NSA, retired), Tina Straley (Executive Director of the MAA), and Michael Mays (West Virginia University, winner of the 2004 Allegheny Mountain Section Award for Distinguished Teaching). Be sure to read on for details regarding all the events, including the student breakout session, the PMET workshop, our "free gift" to those attending Brent Morris' talk, and the Executive Committee's special welcome to new MAA members and members new to the Allegheny Mountain Section. Many thanks to local coordinators Rich Marchand, Lyn Miller, and Bob Vallin for organizing the local details of this exciting meeting.

You may recall that the Executive Committee has scheduled a vote on our proposed changes to the Section Bylaws for the Saturday morning Business Meeting on April 2. I encourage you all to review the bylaws and proposed changes before the meeting, and to attend the Business Meeting (painful though its time of day may be!) to vote. More information about the changes and their implications is given below.

Director of e-communications James Sellers continues to do an excellent job maintaining the web pages for our section. I believe that his efficiency, organization, and enthusiasm have been a big help to all of us on the Executive Committee in communicating information to the section members. If you haven't already done so, be sure to check out the site at www.maa.org/alleghenymtn for all the news regarding our section and its activities.

This is my second year as Chair of the Section, and this is the last "Message from the Chair" you will read from me. I have very much enjoyed serving this section as Second and First Vice Chair, Chair-Elect, and Chair; the experience has been very rewarding, and I am grateful to all the section officers I have served with over the

last 5 years. Since I moved to the Allegheny Mountain Section, I feel that the Executive Committee has tried hard to encourage members of the section to voice their suggestions and volunteer to participate in any way. This is how I became involved in the section, and I hope that I have done my part in continuing to extend that invitation.

Best regards; I hope to see you at Slippery Rock University on April 1 (no fooling!).

Welcome to new members

The Executive Committee extends a special invitation to all new MAA members and all members of the MAA new to the Allegheny Mountain Section to become involved in the section and attend the Spring 2005 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 electronically on the section website www.maa.org/alleghenymtn) to see how to take advantage of this offer.

2005 Certificate for Meritorious Service

Since 1984, the MAA has awarded the Certificate for Meritorious Service to recognize, at the national level, service rendered to a section. Each section is entitled to nominate one person for this award every five years. Congratulations to **Charles Cable** (Emeritus, Allegheny College), who received the 2005 award for the Allegheny Mountain Section at the Joint Meetings in Atlanta this January!

**Spring Meeting April 1-2, 2005
Slippery Rock University**

Tentative Schedule for Spring Meeting

Friday, April 1

11:30-12:30	Section officers meeting
1:00-3:30	Section NExT program/lunch
1:00-5:00	Registration
2:00-6:00	Book exhibits

4:00-5:00 Invited talk: Brent Morris
 5:00-5:30 Social time
 5:30-6:30 Dinner
 6:45-8:45 PMET Workshop: Kathy Ivey
 7:30-8:30 Student breakout session
 8:50-9:50 Student talks
 10:00 - ? Pizza party
Saturday, April 2
 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 talk: Michael Mays
 10:15-11:15 Faculty talks
 11:30-12:30 Invited talk: Tina Straley

A finalized schedule will be included in your registration packet at the meeting registration desk located in Room 105 of Vincent Science Hall, SRU.

Directions to SRU

Slippery Rock University is located in Slippery Rock, Pennsylvania, just off Interstate 79, Exit 105. From north or south, at the exit, turn *left* onto Route 108 East. Travel 4 miles into the borough of Slippery Rock. At the first traffic light, turn *right* onto Main Street. Proceed through one traffic light to a second one, at Kiester Road, and turn *left*. Travel 350 yards to the main campus entrance on the *left*. As you enter campus, follow MAA meeting signs *left* onto the Central Loop. Parking is just past the second stop sign, in the lot to your *right* labeled "School of Physical Therapy Building." Vincent Science Hall is the round building at the far end of this lot. Registration is in Room 105, first floor. (Alternative directions can be found at <http://www.sru.edu/pages/1134.asp>.)

Parking regulations, beginning at 2pm, will be waived in the "School of Physical Therapy" lot and in the overflow "West Lake" lot indicated on SRU's parking map <http://www.sru.edu/downloads/depts/police/parkingmap.htm>. Those arriving earlier can get a free visitor pass from the Math Office in Vincent Science Hall Room 229 or from

SRU's police office, located on Kiester Road just before the campus entrance.

Lodging

Most lodging is a short distance away from campus, near the Interstates I-79 and I-80. A total of 80 rooms are being held until March 18 at three of these local motels:

AmeriHost Inn - Grove City (724-748-5836)
 Rate \$65, approx. 8 miles to SRU

Comfort Inn - Grove City (724-748-1005)
 Rate \$60, approx. 8 miles to SRU

Comfort Inn - Barkeyville (814-786-7901)
 Rate \$58, approx. 13 miles to SRU

Mention "SRU Math Conference" to get the reserved rates. Other hotels in the Slippery Rock area are listed on SRU's web page: <http://www.sru.edu/pages/232.asp>

Invited Speakers

Brent Morris

"Magic tricks, card shuffling, and dynamic computer memory"

Biography: S. Brent Morris has a PhD and MA in mathematics from Duke University and an MS in Computer Science from Johns Hopkins University. He is believed to have the only doctorate in the world in card shuffling; his dissertation is entitled *Permutations by Cutting and Shuffling: A Generalization to Q Dimensions*. He retired after 25 years as a mathematician with the federal government and has taught at Duke and Johns Hopkins Universities. He is now Director of Membership Development for the Scottish Rite Masons in Washington, D.C. He is the author of *Magic Tricks, Card Shuffling, and Dynamic Computer Memories* (MAA, 1998), two U.S. patents, nine technical articles, and nine books on Freemasonry.

Dr. Morris became interested in the perfect shuffle in high school and has pursued its mathematics for over 35 years. He worked his way through college and graduate school as a magician. He was an ACM Distinguished Lecturer, an MAA Visiting Lecturer, a SIAM Visiting Lecturer, and he

has been invited to lecture at the Smithsonian Institution, the Board on Mathematical Sciences of the National Research Council, NASA Goddard Space Flight Center, AT&T Bell Labs, NEC Research Institute, the National War College, the Joint Mathematics Meetings of the MAA/AMS, and over 100 colleges.

Abstract of talk: The talk begins with a magic trick and a scientific analysis of card tricks. This leads to a brief study of card shuffling and the introduction of the perfect shuffle and its mathematics. Formulas are developed that describe the movement of any card in the deck after any sequence of perfect shuffles, and this in turn is used to design a dynamic computer memory. Finally, we show that the accessing algorithm for the dynamic memory, the movement formula for perfect shuffles, and the card trick all use the same mathematical principle. Dr. Morris has written a book by the same title, published by the MAA, at <http://www.maa.org/pubs/books/cards.html>.

Michael Mays

"Graphical representations of mean values"

Biography: Michael Mays received a BA degree in mathematics from WVU in 1973 and a PhD from Penn State in 1977, where he was a Curry Fellow. A student of Raymond Ayoub, he has done mathematical research mainly in combinatorics and number theory. His professional career has been at West Virginia University, with several visiting appointments at the University of the Witwatersrand in Johannesburg and the University of Queensland in Brisbane. Besides the MAA Distinguished Teaching award, Dr. Mays has won departmental, college, and university teaching awards from WVU and was a finalist at West Virginia's Professor of the Year recognition ceremony last year. He has served as president of the West Virginia Council of Teachers of Mathematics and was awarded their Distinguished Service award.

Abstract of talk: We consider several ways to define mean values, including arithmetic, geometric, and harmonic means and some more obscure means as well, and survey techniques for organizing mean values into families to include as many special cases as possible. We will consider algebraic families, a graphical approach due to Moskovitz, and calculus based techniques.

Tina Straley

"People, programs, and problems"

Biography: Tina Straley received her PhD in mathematics from Auburn University, specializing in combinatorics and universal algebra. She has been on the faculties of Spelman College, Auburn University, and Kennesaw State University, and held a visiting appointment at Emory University. At Kennesaw, she served as Chair of the Department of Mathematics and Associate Vice President for Scholarship and Dean of Graduate Studies. She was a Program Officer for Mathematics and Coordinator of Teacher Preparation in the Division of Undergraduate Education of the National Science Foundation.

The author of papers in combinatorics and graph theory as well as on undergraduate mathematics education and the mathematical preparation of teachers, she has also authored and edited reports for the National Science Foundation and the Department of Education and is co-editor of the MAA Notes volume *Leading the Mathematical Sciences Department: A Resource for Chairs*. The PI or co-PI of many grants from the National Science Foundation, the U.S. Department of Education, and Foundations and Corporate Donors, she has participated in the writing and implementation of many more, which include projects in undergraduate mathematics education and research, faculty development, teacher preparation, and graduate study.

Dr. Straley has been active in the Mathematical Association of America for many years, serving on committees and editorial boards, and chairing the Local

Arrangements Committee for the 1997 Atlanta MathFest, the Program Committee for the 2000 Los Angeles MathFest, and the MAA *Notes* Editorial Board. She has served as both Newsletter Editor and Chair of the Southeastern Section of MAA. Dr. Straley assumed her present position as Executive Director of the Mathematical Association of America in January 2000.

Abstract of talk: The Mathematical Association of America is a member-run organization that serves its members through active programs of peer-reviewed journals, magazines, book publication, professional development, special interest groups, public policy, public perception and awareness, and special projects targeting specific issues. All areas are thriving and growing. The first half of this talk will highlight new and recent programs and products of the MAA. The second half of the talk will focus on two interesting problems that appeared in the popular media. These problems are both ill-stated, thus the solutions are not pre-determined. Possible solutions require no more than college-level mathematics and may be approached only using elementary mathematics or may be examined using more advanced techniques. At the least the problems generate interesting conversations with colleagues and especially students and exemplify how interesting problems can be found in unsuspected places.

An April Fool's Gift to You from the Allegheny Mountain Section!

Brent Morris writes: *"Learn a card trick on April Fool's Day so you can fool your friends."* So, to maximize audience participation (and the fun!), the Executive Committee has decided to purchase decks of playing cards with the MAA logo to give to audience members at his talk. Our spring meeting will be the debut of this new item in the line of MAA merchandise!

Student Activities

Bob Vallin, Slippery Rock University

Each of us has heard the questions. They range from the well-meaning friend asking "What are you going to do with a math degree?" to your dad wanting to know "How will you find a decent job in math?" to your mom prying "Are you seeing anyone? Is it serious? When do I get to meet them?" There are tons of questions without easy answers. While some of these ("Will I be rich?") require help from a magic ball with a polyhedron floating inside, we can answer some of the others. This year's Breakout Session is on **Mathematics and Careers**. Our panelists who work/have worked in the government, business, or education will talk about their jobs and answer your questions. Please come join us to find out what your future may hold.

Section NexT Workshop

Barbara Faires, Westminster College

The spring Section NexT workshop is Friday, April 1, 1 – 3:30 pm, with a talk by National NExT Coordinator Joe Gallian at 2 pm. **New faculty members in the Section are encouraged to attend!!**

This is a wonderful opportunity for members of Section NExT and all new faculty in our section. Joe Gallian is a great speaker and his topic "*Getting Undergraduates Involved in Research*" is one on which he is truly an expert. He has provided the following abstract:

"Although involving undergraduates in research has been a long-standing practice in the experimental sciences, it has only been recently that undergraduates have been involved in research in mathematics in significant numbers. In this talk I discuss in general terms such things as how to get started in involving undergraduates in research, the benefits of undergraduate research to faculty and students, how to find suitable research problems, and what is considered to be undergraduate research."

This is a good complement to our fall workshop, which focused on undergraduate research. Bring with you any information to share regarding undergraduate research,

such as conferences, support, or topics. You do not want to miss this opportunity!

It is at this Spring Meeting that we also begin planning for the fall workshop, so ideas for that event will be on the agenda as well. Direct questions and suggestions to John Bukowski (bukowski@juniata.edu) or Barbara Faires (fares@westminster.edu).

PMET Minicourse

Dr. Kathy Ivey will conduct a PMET (Preparing Mathematicians to Educate Teachers) Minicourse at the Spring 2005 meeting. PMET is a program designed to assist faculty who currently train or are interested in training pre- and in-service teachers. The philosophy of the program is guided by the recent CBMS report, *The Mathematical Education of Teachers (MET)*. The central activity of PMET is an extensive series of summer workshops for college and university faculty.

The PMET minicourse at the Allegheny Mountain Section meeting from 6:45-8:45 pm on April 1 at Slippery Rock University is a snapshot of the full-length workshops to be held in the summer of 2005. Minicourse participants will examine the PMET philosophy, preview tentative agendas for an elementary and a secondary workshop, experience a sample activity that has been used with pre-service teachers, review some pertinent literature, and address questions about the PMET workshops.

Biography: Dr. Kathy Ivey is the Chair of Mathematics and Computer Science at Western Carolina University in Cullowhee, NC. She holds a Ph.D. in Mathematics Education from Washington State University, an M.S. in Mathematics from Oregon State University, and a B.S. in Mathematics and English from East Tennessee State University. She is a Co-Director of two PMET workshops for 2005, one elementary and one secondary. In 2004, she co-directed an elementary PMET workshop. Dr. Ivey has received several awards for excellence in teaching, including the WCU College of Arts and Sciences Award in 2000, the WCU

Chancellor's Distinguished Teaching Award in 2001, and the UNC Board of Governors Award in 2002. She has served on the editorial panels of several journals in mathematics education and has made numerous presentations at state, regional, national, and international meetings. Her primary areas of interest are the process by which mathematics students become mathematics teachers and how and what students learn about mathematics.

Report of the Nominating Committee

Bud Boman, Penn State DuBois

At the business meeting on Saturday, April 2, we will elect members to three offices in the Section. The offices and nominees are:

Coordinator of Student Programs:

Robert Vallin, Slippery Rock University

Newsletter Editor:

Lyn Miller, Slippery Rock University

Second Vice Chair:

Kim Roth, Wheeling Jesuit University

John Thompson, University of Pittsburgh at Johnstown

Lyn Miller is the current Newsletter Editor for the Section. She received her PhD in computational commutative algebra from the University of Maryland in 1994. A regular at both sectional and national MAA meetings, Lyn served as Vice-Chair and Nominations Committee Chair for the Kentucky Section of the MAA and was also a National Project NExT Fellow in 1995-96.

Kim Roth received her PhD from Penn State University in 2002. Her current interests include fractals and chaos, and also the role of definitions in student understanding of mathematics. Regularly attending sectional and national MAA meetings, Kim is the treasurer of the Young Mathematicians' Network editorial board, on which she has served since 2002, participates in Section NExT activities, and is a 2002-2003 National Project NExT Fellow.

John Thompson received his PhD from the University of Kentucky in 1998. His current

interests include harmonic mappings on the complex plane, speaking within the mathematical curriculum, and teacher preparation. Yet another regular at both sectional and national MAA meetings, John mentors undergraduates, participates in Section NexT activities, and has served as a member of the Section's Nominating Committee in 2003. He is a 1999-2000 National Project NExT Fellow.

Bob Vallin is the current Coordinator of Student Programs for the Section. His PhD in classical real analysis is from North Carolina State University ("The Wolfpack – at least it's not UNC"). He is the originator of two annual events at the Section's spring meeting: the Student Breakout Session and the Prizers and Puzzlers. His mathematical interests also include fair division and the history of mathematics, and he claims to be the only certified holder of the nationally coveted "Adamantium Dot."

Major Topics for Business Meeting

I. Summer Short Course Discussion

Ron Harrell, Co-director

The Business Meeting scheduled for 8:00 am Saturday, April 2, at the upcoming Spring Meeting will be used to determine what the section will do with the Summer Short Course. As explained in an article appearing in last fall's newsletter (refer to it for details, or write rharrell@allegheny.edu for a copy), the summer short course has lost about \$4000 over the past four years. The primary reason is lack of participants.

Until now the section officers have been willing to offer the course as a service to section members, even though we occasionally lose money. The latter has happened in the past, but these events were followed and offset by many years in which we did better than breaking even. On the other hand, the last four years have seen us lose substantial money due to a consistent lack of participation, even though the course continues to have excellent speakers, wider advertising, and improved facilities on the

Allegheny campus, where it is traditionally held. At the Business Meeting we must decide between discontinuing the short course and continuing some modified version of it (again, see last fall's newsletter article for some suggestions). Please think about this issue, come to the Business Meeting, and let us know what you want to do with the summer short course.

II. Changes in the Section Bylaws

Tamara Lakins, Chair

The Executive Committee brings to the section proposed changes in our bylaws; a vote on these changes will be held during the spring meeting at the Saturday morning Business Meeting on April 2. Our current bylaws require that the proposed revisions be submitted to the section members at least fifteen days prior to the meeting at which the vote will take place. Accordingly, we have included the proposed new version of the bylaws toward the end of this newsletter. In addition, we have posted on the section webpage (www.maa.org/alleghenymtn) the current version of the bylaws, the proposed new version of the bylaws, and a list that summarizes the proposed changes.

The most significant change we propose is to split the office of Secretary-Treasurer into two separate offices. Other proposed changes are adjusting the section purpose so that it agrees with the national MAA mission, modifying some of the language of the bylaws (for clarification purposes or to bring them in line with current practice), and explicitly describing the appointed offices of Coordinator of Section NExT, and Director of e-communications. These latter offices were added over the last several years, but the section bylaws were never modified to reflect these changes.

If the new bylaws are voted as acceptable by the section membership, then they will be submitted to the Committee on Sections for its recommendation to the MAA Board of Governors.

III. Secretary-in-Training

Tamara Lakins, Chair

If the new bylaws are voted as acceptable by the section membership at the Spring 2005 Business Meeting and later approved by the MAA Board of Governors, then the split of the office of Secretary-Treasurer into two separate offices will occur as follows. The current office of Secretary-Treasurer will cease to exist and the separate offices of Secretary and Treasurer will be established at the close of the Spring 2006 business meeting. At the Spring 2005 meeting, a Secretary-in-training will be appointed by the Executive Committee to begin working with the current Secretary-Treasurer. At the Spring 2006 meeting, an election for Treasurer will occur and the Executive Committee will appoint a Secretary. Election of a Secretary will occur at the Spring 2007 meeting.

The Executive Committee encourages anyone who is interested in the office of Secretary to contact the Chair of the Section, in order to be considered for the Secretary-in-Training position to be appointed in Spring 2005, as well as Ben Freed, the current Secretary-Treasurer, in order to learn what the position entails.

Ohio Section Summer Short Course

The Ohio Section's summer short course, titled *Making the Math Visible: A Workshop Exploring Geometry and its Connections to Algebra, Trigonometry and Art*, will be held at John Carroll University (in Cleveland) on June 27-29, 2005. The workshop leader, Sr. Barbara Reynolds, is a Professor of Mathematics and Computer Science at Cardinal Stritch University in Milwaukee. Sr. Barbara, who calls herself "an artist whose palette is mathematics," is coauthor of a new text, *College Geometry using The Geometer's Sketchpad*, which is due to be released at the end of the summer. She has also developed a course in Visual Mathematics, in conjunction with art faculty at her home institution, and will draw on both of these experiences in presenting the workshop.

The course will focus on using geometry to gain visual insight into trigonometric and algebraic relationships, as well as on the geometric foundations for various topics in art; thus, it should appeal to mathematics teachers and professors at a variety of levels. Prior experience with Geometer's Sketchpad is not necessary.

Cost for the course is \$150, room and board additional. For information/registration, see <http://www.jcu.edu/math/shortcourse/>.

News from the Campuses

(carried over from Fall 2004)

Slippery Rock University

Bob Vallin

We had a busy time at SRU last year. Over the summer, we were the proud hosts of the Summer Symposium in Real Analysis XXVIII, which was supported by the *Real Analysis Exchange* and the NSF and organized by Robert Vallin. We're also happy to announce the creation of three new scholarships named for professors emeriti Anthony V. Pagano, Clair W. McClure, and Hubert C. Voltz, who all enjoyed the honor immensely. Two scholarships honoring math alumni were awarded for the first time last spring, with Melissa Hulings winning the Janice Sharek Hogue Memorial Scholarship and Mark Hogue receiving the David Czapor Memorial Scholarship.

On a more personal level, Jeff Forrest has returned from a productive sabbatical. Lyn Miller is a co-PI on the Association for Women in Mathematics' grant from the NSA to fund the Sonia Kovalevsky Days program. Visitors to the Math Department included Tom Banchoff (Brown), Chris Ostaszewski (Illinois State), John Holcomb (Cleveland State), David Cervone (Union College), and Ed Connors (UMass-Amherst). Students Joel Normand, Andy Kirby, Erin Bellis, and Pete Schallot all gave talks at annual conferences last spring.

Allegheny Mountain Section Officers

2004-2005

Mike Berry, Chair-Elect (2004-2005)
(304) 473-8330, berry@wvwc.edu

Bud Boman, First Vice Chair (2004-2005)
814-375-4834, ecb5@psu.edu

John Bukowski, Section NExT Co-
Coordinator (2003-2005)
814-641-3591, bukowski@juniata.edu

Barbara Faires, Section NExT Co-
Coordinator (2004-2006)
724-946-7293, fares@westminster.edu

Ben Freed, Secretary-Treasurer (2004-2006)
814-393-1930, freed@clarion.edu

Ron Harrell, Short Course Co-Director
(2004-2006)
814-332-5344, rharrell@allegheeny.edu

Tamara Lakins, Chair (2003-2005)
814-332-2957, tlakins@allegheeny.edu

John Lattanzio, Second Vice Chair (2004-
2005)

724-357-4760, John.Lattanzio@iup.edu

Beverly Michael, Section NExT Co-
Coordinator (2004-2006)
412-624-8335, bkm@pitt.edu

Lyn Miller, Newsletter Editor (2003-2005)
724-738-2878, lyn.miller@sru.edu

Don Platte, Governor (2003-2005) and Short
Course Co-Director (2003-2005)
814-824-2378, platte@mercyhurst.edu

James Sellers, Director of e-communications
(2004-2006)
814-865-7528, sellersj@math.psu.edu

Gary Stoudt, Historian
724-357-2608, gsstoudt@iup.edu

Bob Vallin, Coordinator of Student Programs
(2003-2005)
724-738-2856, robert.vallin@sru.edu

P R O P O S A L

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

Article I.

Name and Purpose.

1. The name of this Section shall be the Allegheny Mountain Section of the Mathematical Association of America (MAA).
2. The purpose of the Allegheny Mountain Section shall be to further the mission of the Mathematical Association of America (MAA), "to advance the mathematical sciences, especially at the collegiate level," within the territory defined below in Article II, Section 1.

Article II.

Membership.

1. The membership of the Allegheny Mountain Section shall be as follows:
 - a. members of The Mathematical Association of America residing in Pennsylvania and West Virginia whose addresses have zip codes with the first three digits
 - i. 150 – 168
 - ii. 247 – 254
 - iii. 258 – 268
 - b. members of the Mathematical Association of America not being resident in the territory of this Section, who have become members of this Section in accordance with Article VI, Section 6 of the By-Laws of The Mathematical Association of America.

Article III.

Officers.

1. 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 Student Programs. 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 and of this Section.
3. The Executive Committee shall consist of the elected and appointed officers of the Section and the Section Governor. All members of the Executive Committee shall have voting privileges at Executive Committee meetings.
4. The term of each officer shall be for two years, except for the Chair-Elect and Past Chair, who serve for one year. A Vice Chair cannot serve for two consecutive two-year terms, and a Past Chair cannot begin a term as Chair-Elect in the year after the term as Past Chair ends. The terms of the Treasurer, Secretary, Newsletter Editor, Director(s) of Short Courses, and Coordinator of Student Programs 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 appointed officers shall assume their duties immediately upon appointment by the Executive Committee.
5. A Treasurer, Coordinator of Student Programs, Vice-Chair, Director of Short Courses (if the Executive Committee determines a second director to be necessary), and Newsletter Editor shall be elected at the Spring Meeting held in odd numbered years. A Chair-Elect, Vice-Chair, Director of Short Courses, and Secretary 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. The Vice-Chair serving his or her second year shall be designated the First Vice-Chair. The Vice-Chair serving his or her first year shall be designated the Second Vice-Chair.
6. A nominating committee of three persons appointed by the Chair at least six months prior to an election shall prepare a slate of candidates for each office to be filled by an election. 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. The Chair shall have general charge and shall execute the affairs of the Section. The Chair shall appoint all committees (except the Executive Committee), unless otherwise directed by the Executive Committee, and shall be an ex-officio member of all committees.
8. The Treasurer shall keep all the financial accounts and records of the Section. The Treasurer 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 Reports and other requested reports with the MAA Director of Finance.
9. The Secretary shall keep copies of all correspondence of the Section and obtain current records of Section membership from the MAA national office. The Secretary shall file the Annual Section Report with the chair of the Committee on Sections and keep minutes of all Business and Executive Committee meetings of the Section.
10. The duties of the First Vice-Chair shall include making speakers' arrangements for the Section Spring Meeting; the First Vice-Chair shall assume the duties of the Chair in the event the Chair is unable to serve. The duties of the Second Vice-Chair shall include the

coordination of contributed talks and making local arrangements with the host institution for the Section Spring Meeting.

11. The Chair-Elect and Past Chair shall participate in the meetings of the Executive Committee for the purpose of maintaining continuity in the programs of the Section.
12. The duties of the Newsletter Editor shall include publishing a newsletter to be disseminated to all members of the Section at least twice each academic year – one in the Fall and one at least a month prior to the Spring Meeting.
13. The Coordinator of Student Programs is responsible for the student portion of the program at the Spring Meeting and for any other student activities sponsored by the Section.
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 collecting 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 by appointment any vacancy of an elected office (except Section Governor and Chair Elect) until the next annual election, at which time the committee to make nominations will include a slate of candidate(s) for this vacancy. The person elected to fill such a vacancy may serve only one year, to maintain Article III, Section 5. The Executive Committee is empowered to fill by appointment a vacancy of the office of Chair-Elect until the next annual election, when the appointment will end and the nominating committee will present a slate of candidates for the office of Chair, who will serve as specified in Article III, Section 5.

Article IV.

Meetings.

1. This Section shall hold at least one regular meeting in the spring of each year at which time the annual business meeting will be held. The time, place, and program for the annual Spring Meeting, and any other regular or special meeting, shall be arranged by the Executive Committee.
2. A Special Meeting may be called by the Chair or by the Executive Committee.
3. Each member of the Section shall be notified in writing at least ten days in advance of any Regular Meeting or Special Meeting of the Section.
4. A quorum shall consist of not less than 25 members.

Article V.

Dues and Use of Assets.

1. A registration fee as determined by the Executive Committee shall be collected from those registering at each official meeting of the Section.
2. The assets of the Allegheny Mountain Section shall be used exclusively to further the purpose of the Section, and in the event of the dissolution of the Section the remaining assets will be returned to the Mathematical Association of America to be used according to the regulations of that organization.

Article VI.

Amendments.

1. Amendments to the By-Laws are proposed by the Executive Committee. Members of the Section may recommend amendments to the By-Laws by submitting them in writing, signed by three members of the Section, to the Executive Committee.
2. A Proposed Amendment shall be disseminated to every member of the Section at least fifteen days prior to the meeting at which the voting on the amendment will take place.
3. An amendment of the By-Laws shall be approved by receiving a majority of the votes cast by the members at a Regular or Special Meeting of the Section, subject to the approval by the Board of Governors of the Mathematical Association of America.
4. When an amendment has been approved by the members of the Section it must be submitted to the Committee on Sections for its recommendation to the Board of Governors.
5. A complete revision of this set of By-Laws will be subject to the same procedure as that of amending this set.

April 2, 2005

**Allegheny Mountain Section Mathematical Association of America
Annual Spring Meeting - Talk Information Form**

(online at http://www.math.psu.edu/sellersj/alleghenymtn/annual_meeting_2005/talkreg.htm)

Mark the appropriate blank: I am ___ a student ___ faculty.

Name: _____

Institution: _____

Email Address: _____

Mailing Address:

Title of Talk:

Abstract of Talk: (Please **attach** separately if needed.)

Special Equipment Needed:

—

Each room is equipped with chalkboard, overhead projector, and screen. Other devices **may be** available with prior notification, but are not guaranteed. For such devices, please also note necessary capabilities: software to be used, CD-R or ZIP drive, Internet, etc.

Student Speakers: You receive a free one-year membership to the MAA. We will have a form for you to complete at the meeting in order to initialize this membership.

Mail **student** Talk Information Forms to:
Bob Vallin
Department of Mathematics
Slippery Rock University
Slippery Rock, PA 16057

Mail **faculty** Talk Information Forms to:
John Lattanzio
Department of Mathematics
Indiana University of Pennsylvania
Indiana, PA 15705

Talk Information Forms must be **received** by March 25, 2005.

Allegheny Mountain Section Mathematical Association of America
Annual Spring Meeting – Registration Form

(online at http://www.math.psu.edu/sellersj/alleghenymtn/annual_meeting_2005/meetreg.htm)

Name:

Institution: _____

Email Address: _____

Mailing Address:

Registration Category (check one):

Regular Registration (\$25.00)

- _____ Faculty, 2- Year Institution
- _____ Faculty, 4- Year Institution
- _____ Faculty, University
- _____ Business, Industry, or Government
- _____ High School Teacher

“New Person” Registration (free) *

- _____ Faculty, 2- Year Institution
- _____ Faculty, 4- Year Institution
- _____ Faculty, University
- _____ Business, Industry, or Government
- _____ High School Teacher
- _____ Undergraduate Student
- _____ Graduate Student

* - A "new person" is defined as someone who, as of this academic year, is either a new member of the MAA or is a member of the MAA who is new to the Allegheny Mountain Section.

MAA member? _____yes _____no

Optional Contribution to support Section NExT program: _____yes (\$5.00) _____no

Attending PMET Minicourse? _____yes (\$0.00) _____no

Friday Evening Dinner? _____yes (\$14.00) _____no

Saturday Breakfast? _____yes (\$7.00) _____no

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

Checks should be made to *Allegheny Mountain Section, MAA*, and sent with this form to: Ben Freed, Mathematics Department, Clarion University, Clarion, PA 16214.

Registration Forms must be received by March 25, 2005.

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