

Allegheny Mountain Section Newsletter

Volume XXX, Issue 1

Spring 2007

Greetings from Our Chair...

Michael L. Berry, West Virginia Wesleyan College

Greetings from Buckhannon. I hope you have marked your calendars for the upcoming spring section meeting at Mercyhurst College in Erie, April 13-14. Elsewhere in this newsletter is a complete schedule of the meeting and a list of the speakers. There is also the list of candidates for offices as submitted by the nominating committee.



This is my last "Message from the Chair". I have enjoyed serving the section as Second and First Vice-Chair, Chair Elect and Chair. Thank you to the section officers I have served with during the past five years.

See you in Erie. The organizers have promised that winter will be gone for us.

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...and Our Governor

John Bukowski, Juniata College

Greetings from chilly Huntingdon! Happy Year of Euler! I hope that 2007 has gotten off to a good start for everyone. I know that many of you were able to attend this year's Joint Meetings in New Orleans, which I very much enjoyed – and not just because of the food, such as the crawfish etouffee and the famous Café du Monde beignets and café au lait! It was a great decision by the MAA and the AMS to have the meetings in New Orleans sixteen months after Hurricane Katrina. The meeting ran very smoothly, and nearly all of the hotel and restaurant workers I encountered there were very thankful for our presence as the city struggles to rebuild itself.

The Board meeting consisted of a great deal of information, as usual. As I have reported in previous newsletters, the MAA continues to be financially strong. The operating budget is now on the order of ten million dollars. We received the final reports from the Cycle I Strategic Planning groups: American Mathe-

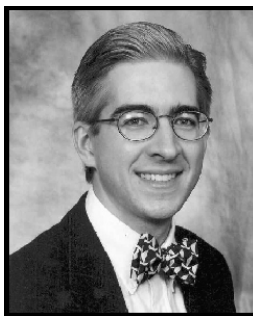
matics Competitions, Professional Development, and Revenue. One interesting recommendation from the Revenue group was for the MAA to increase unrestricted funds to equal one-half to three-quarters of operating expenses by 2010, and to equal a full year by 2015. This group also noted that the MAA needs to reduce its dependence on dues, and that no one area should comprise more than twenty percent of total revenue. Cycle II is now underway, with the topics of Governance, Students, and Membership. We had breakout sessions in the early afternoon to discuss ideas with members of the working group on students. This year's business meeting saw the "passing of the gavel," as Joe Gallian assumed the presidency of the MAA from Carl Cowen.

I wrote in my last report about the grand opening celebration of the new Carriage House at MAA headquarters in Washington, DC (a short drive from the Allegheny Mountain Section!). Opening festivities

From the Governor*Continued from Page 1*

will be held April 19-21, 2007. No official information is available yet, but I am sure we will be hearing from the MAA soon about the slate of events for that weekend.

MathFest 2007 will be held August 3-5 in San Jose, CA, then it's back to California again in January for the 2008 Joint Meetings in



San Diego! If you are looking for something to do in the meantime, check out the exciting slate of PREP workshops offered by the MAA this year. Topics range from quantitative reasoning to wavelets to Euler (of course!). Information about these programs and many other interesting things can be found at MAA Online, <http://www.maa.org>. I

look forward to seeing all of you at the Spring Meeting at Mercyhurst College in Erie on April 13 and 14.

Final Calls for Nominations**Section Service Award**

The criterion for the Annual Allegheny Mountain Section Service Award is a consistent record of excellence in service to the section over a period of time. In this context "service" is interpreted in a broad sense to include holding office, coordinating contests, organizing sessions, acting as a panelist, speaking at sessions, acting as the coordinating host for a meeting, or participating in any other activity that contributes to the well-being of the organization.

George Bradley serves as Chair of the Service Award Committee. Any member of the Section is welcome to forward nominations to him by **March 15, 2007**. His contact information is as follows:

George Bradley
Department of Mathematics
Duquesne University
Pittsburgh, PA 15282
Email: bradley@duq.edu

Section Mentoring Award

Since the year 2000 the Allegheny Mountain Section of the MAA has awarded the Distinguished Faculty Mentor of Undergraduate Mathematics Students Award. We are soliciting nominations for this award from now through **March 30, 2007**. A nominee should have made significant contributions to the development of undergraduate students in mathematics as scholars. This includes, but is not limited to, encouraging student participation in MAA activities and advising students who make presentations at the Section meetings. Please send your nomination with a description of how the nominee meets the criteria to:

Robert Vallin
Department of Mathematics
Slippery Rock University
229 Vincent Science Hall
Slippery Rock, PA 16057-9989
Email: robert.vallin@sru.edu

Isaac Todhunter, (1820 - 1910):

[Asked whether he would like to see an experimental demonstration of conical refraction]

No. I have been teaching it all my life, and I do not want to have my ideas upset.

SECTION NEXT

John Bukowski, Juniata College

**Friday, April 13, 2007, 1 – 3:30 pm,
including lunch**

The Spring Section NExT workshop will be held directly preceding the section meeting on **Friday, April 13, 1:00-3:30 p.m.**, beginning with lunch. New faculty members in the section are encouraged to attend!

Although we are still planning this session, it is sure to involve another great presentation and some stimulating discussion among Section NExTers! Watch your e-mail later this spring for an announcement about the workshop at Mercyhurst. Information will also be available, as always, at the Section NExT website, <http://faculty.juniata.edu/bukowski/next>. Questions and suggestions regarding Section NExT should be directed to John Bukowski (bukowski@juniata.edu) or Barbara Faires (fares@westminster.edu).

**ALL NEW FACULTY IN THE SECTION
ARE INVITED TO JOIN SECTION
NEXT!**

Editor's note:

The deadline for applying to National Project NExT for this year is April 16, 2007. Faculty for whom the 2007-2008 academic year will be the first or second year of full-time teaching at the college/university level (after receiving the Ph.D.) are invited to apply to become Project NExT Fellows. Approximately seventy Project NExT Fellows will be selected for the 2007-2008 year. If you have questions about whether you are eligible to apply to Project NExT, please consult the NExT applicants' FAQ. For more details, see the Project NExT web site at <http://archives.math.utk.edu/>

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 2007 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.

Spring Meeting	April 13-14, 2007	Mercyhurst College, Erie, PA
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Tentative Schedule**Friday, April 13**

11:30-12:30	Section officers meeting
1:00-3:30	Section NExT
2:00-5:00	Registration/ Book Exhibits
3:55-4:00	Welcome from Mercyhurst
4:00-5:00	Invited Talk
5:30-6:45	Dinner/ Awards
7:00-8:00	Student breakout session
7:00-8:15	Book Exhibits
8:15-10:00	Student talks
10:00-????	Pizza Party

Saturday, April 14

7:30-8:45	Breakfast
8:00-8:45	Business Meeting
8:00-9:00	Registration
9:00-12:00	Book Exhibits
9:00-10:00	Invited Talk
10:15-11:25	Faculty Talks
11:45-12:45	Invited Talk
12:45	Closing remarks

A finalized schedule will be included in your registration packet at the meeting registration desk in the Hirt Academic Center, located between Briggs Avenue and East Main Drive. A campus map can be found later in this newsletter.



Join Us April 13-14!

Directions to Mercyhurst College, Erie, PA

Take I-79 North to I-90 East. Leave I-90 at Exit 27 (State Street Exit). Follow Rt. 97 North for one mile to Jct. 505. Veer right and continue on Rt. 97 North (Old French Road) to East 38th Street. Turn right, four blocks to Mercyhurst College.

Best parking is the upper ramp (lot P2), the lot adjacent to the ramp (lot P4), and behind Zurn Hall (lot P8). After 3:00 you may park in any lot without a permit (except for lot P3).

Additional information can be found at <http://math.mercyhurst.edu/maameeting/>. Links to a campus map and local map of Erie are available there.

Lodging at the Meeting

A link to all the places to stay in the Erie area is <http://www.visiteriepa.com>. There are several motels at the Erie exits of I-90, but reserve your room early. There is an 11% occupancy tax that is often not included in the original price quote. The most convenient motels are at I-90 and route 97 (Exit 27, or the Perry Highway exit):

Quality Inns Suites/Super 8 Motel, 8040 Perry Hwy, 814-864-4911

Days Inn, 7415 Schultz Road, 814-868-8521

Red Roof Inn, 7865 Perry Highway, 814-868-5246

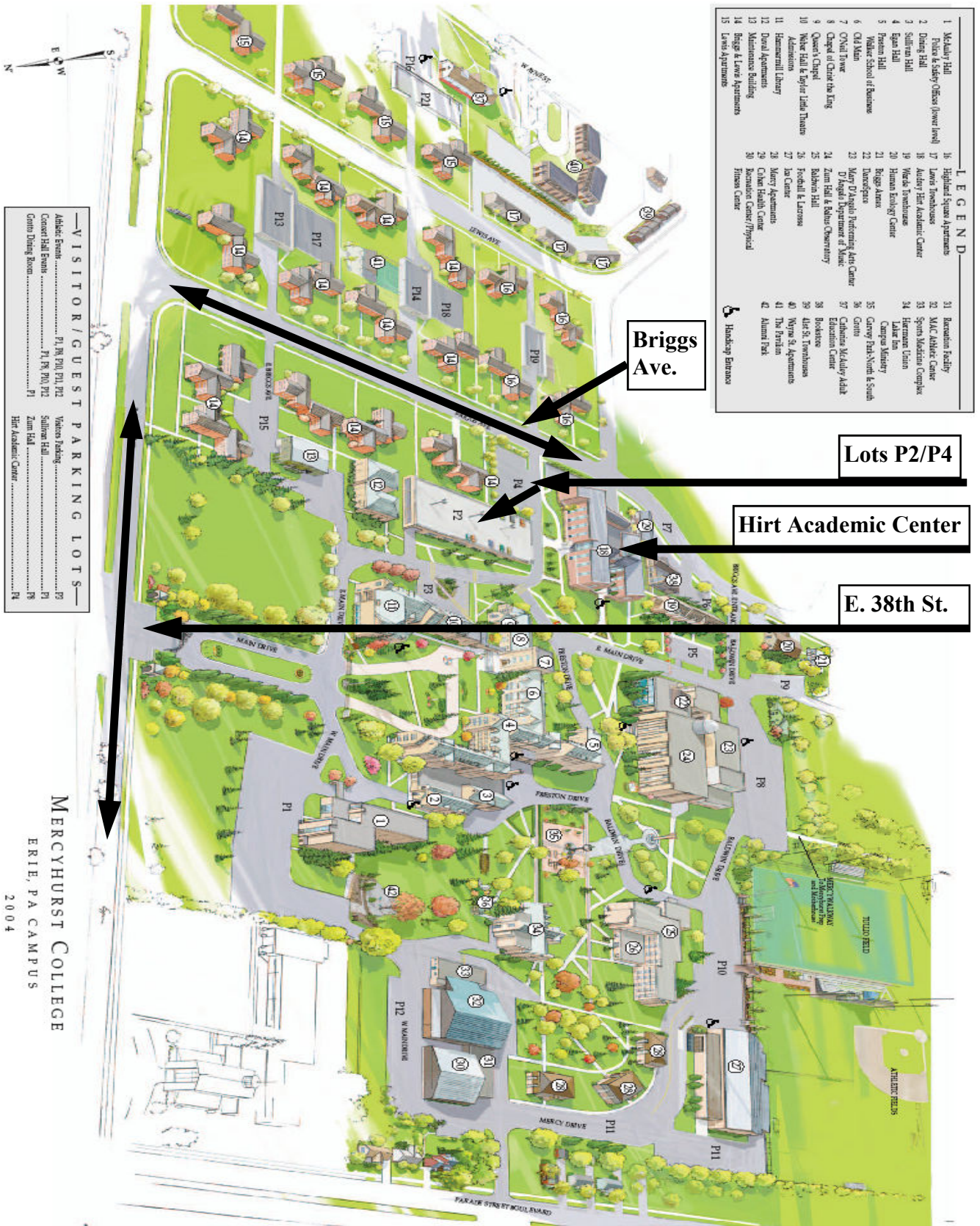
Best Western - Erie Inn & Suites, 7820 Perry Hwy, 814-864-1812

Tallyho-tel, Wattsburg Rd., 814-868-0879

Travelodge, 6101 Wattsburg Rd, 814-825-3100

The next best exit is I-90 and route 19 (Exit 24, or Peach Street exit). In downtown Erie are the *Downtown Erie Hotel*, *Avalon*, and *Downtown Super 8*.

See <http://math.mercyhurst.edu/maameeting/> for



LEGEND

1	McAuley Hall	16	Highland Square Apartments	31	Recreation Facility
2	Police & Safety Offices (lower level)	17	Lewis Townhouses	32	MAC Athletic Center
3	Dining Hall	18	Audrey Hirt Academic Center	33	Sports Medicine Complex
4	Sullivan Hall	19	Wick Townhouses	34	Herman Union
5	Esplanade	20	Herman Ecology Center	35	Water Inn
6	Freeman Hall	21	Briggs Annex	36	Campus Ministry
7	Water School of Business	22	Therapex	37	Carroll Park/Venue & South Campus
8	Old Main	23	Mary D'Angelo Performing Arts Center	38	Catholic McAuley Adult Education Center
9	Queen's Chapel	24	Zimm Hall & Babus Chemistry	39	Bookstore
10	Queen's Chapel	25	Football & Lacrosse	40	Wynne & Apartments
11	Water Hall & Taylor Little Theatre	26	Ice Center	41	The Pavilion
12	Admissions	27	Ice Center	42	Alumni Park
13	Hammervell Library	28	Ice Center		
14	Dental Apartments	29	Chapel Health Center		
15	Administrative Building	30	Recreation Center/Physical Fitness Center		
	Briggs & Lewis Apartments				

VISITOR/GUEST PARKING LOTS

Admission Events	P1, P8, P10, P11, P12
Concert Hall Events	P1
Contra Dining Room	P1
Visitor Parking	P1, P8, P10, P11, P12
Sullivan Hall	P1
Zimm Hall	P1
Hirt Academic Center	P1

Briggs Ave.

Lots P2/P4

Hirt Academic Center

E. 38th St.

MERCYHURST COLLEGE

ERIE, PA CAMPUS

2004

Election of Officers

At the business meeting on Saturday, April 14, we will elect members to five offices in the Section. The Nominating Committee of Bob Fliess (West Liberty State College), Don Platte (Mercyhurst College), and Tamara Lakins (chair, Allegheny College) has put forward the following slate of candidates:

For **Chair:** John Thompson, University of Pittsburgh at Johnstown

For **Second Vice Chair:** Rick Brazier, Penn State Dubois
Yu-Ju Kuo, Indiana University of Pennsylvania
Dan Look, Indiana University of Pennsylvania

For **Treasurer:** Ben Freed, Clarion University

For **Newsletter Editor:** Lyn Miller, Slippery Rock University

For **Coordinator of Student Programs:** Natacha Fontes-Merz, Westminster College

Nominees will also be taken from the floor at the business meeting. Brief biographies of the nominees can be found below, and on the section webpage at www.maa.org/alleghenymtn. Note that the Nominating Committee is presenting a nominee for the office of Chair. This is in accordance with the Bylaws of the Section, which state that when the Executive Committee fills by appointment a vacancy in the office of Chair-Elect (as it did when Bud Boman moved out of the Section), the Nominating Committee must present a slate of candidates for the office of Chair at the next annual election. In addition, recall that last year's election of Ben Freed as Treasurer was for a one-year term, to establish the alternating schedule for the election of the new distinct offices of Secretary and Treasurer. This year's election for Treasurer will be for the standard two-year term.

John Thompson is the current First Vice-Chair of the Section, after serving one year as Second Vice-Chair. He received his Ph.D. in complex analysis from the University of Kentucky in 1998 and is Associate Professor of Mathematics at the University of Pittsburgh at Johnstown, where he has been for 8.5 years. John is a 1999-2000 national Project NExT fellow, has regularly participated in the Allegheny Mountain Section NExT since 2000, and served on the Section's Nominating Committee during 2003-04. His current interests include the teaching of History of Mathematics and college geometry.

Rick Brazier received his Ph.D. at the University of Arizona in 1997; his areas of mathematical interest include the forward modeling and inverse theory of seismology and PDE's, and he is also active in undergraduate research. Rick is currently Associate Professor of Mathematics at Penn State Dubois, where he has been since 1996. He was the local coordinator of the 2003 spring section meeting at Penn State Dubois and has been active in the Allegheny Mountain Section NExT since 1999.

Yu-Ju Kuo is Assistant Professor of Mathematics at IUP, where she has been since receiving her Ph.D. at Arizona State University in 2002. Her areas of mathematical interest include optimiza-

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Election of Officers (continued)

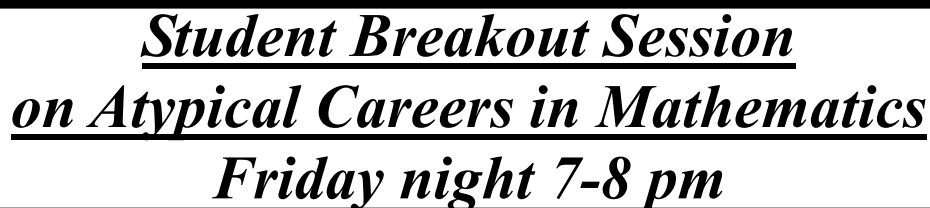
tion, numerical methods for ODE's and PDE's, and numerical analysis. She has been active in the Allegheny Mountain Section NExT since 2002.

Dan Look is Assistant Professor of Mathematics at IUP, where he has been since receiving his Ph.D. at Boston University in 2005. His area of mathematical interest is complex dynamics, and he has participated in the Allegheny Mountain Section NExT since 2006.

Ben Freed served as Secretary/Treasurer of the Section from 2001 until 2006; since then he has continued on as Treasurer. He earned his Ph.D. in geometric topology from Kent State University in 1975 and is currently interested in statistics. Ben has also served as Second and First Vice-Chair of the Section.

Lyn Miller has served as the Section's Newsletter Editor since 2003. She is Assistant Professor of Mathematics at Slippery Rock University, where she has been since 2001. She earned her Ph.D. in computational commutative algebra at the University of Maryland in 1994 and is also interested in mathematics for future elementary teachers. Lyn was active as an officer of the Kentucky section in 1996-2001 and is currently a member of the MAA Committee on Undergraduate Student Activities and Chapters, as well as the Subcommittee on Travel Study.

Natacha Fontes-Merz earned her Ph.D. in approximation theory and analysis from Kent State University in 2004 and since then has been Assistant Professor of Mathematics at Westminster College. She is a 2005-06 national Project NExT fellow, has participated in the Allegheny Mountain Section NExT since 2004, and is currently the "Puzzle Czar" of the Section.



Student Breakout Session
on Atypical Careers in Mathematics
Friday night 7-8 pm

Ask a random non-math person about mathematicians, and he or she will talk about the genius working in solitary, possibly going on in great detail about the lack of social and grooming skills. Ask a random person (even a mathematician) about jobs for people with math backgrounds and you'll right away hear teacher, maybe actuary, and maybe, maybe operations research. However, there is a whole world out there for us to conquer. Come listen to some people with non-typical careers talk about the path that led them to where they are. Learn about unusual directions in which your own journey might go.

Information about our Invited Speakers

Deanna Haunsberger, Carleton College

Title: *Bright Lights on the Horizon*

Abstract: What do a square-wheeled bicycle, a 17th-century French painting, and the Indiana legislature all have in common? They appear among the many bright stars on the mathematical horizon, or perhaps, more correctly in the Math[ematical] Horizons. Math Horizons, the undergraduate magazine started by the MAA in 1994, publishes articles to introduce students to the world of mathematics outside the classroom. Some of mathematics' best expositors have written for MH over the years; here are some of the highlights from the first ten years of Horizons.

Biography: Dr. Deanna Haunsperger is a professor of mathematics at Carleton College in Minnesota. Since her own undergraduate days at a small liberal arts college in Iowa, she has been interested in increasing the number of students who pursue advanced degrees in mathematics. That passion has guided her as a former co-editor for Math Horizons (the Mathematical Association of America's magazine for undergraduates) and as co-founder and co-director of Carleton's Summer Mathematics Program for Women (a successful, intensive four-week summer program to encourage talented undergraduate women to pursue advanced degrees in the mathematical sciences). Currently she is serving as the Second Vice President of the MAA and chairing the MAA's Strategic Planning Committee on Students. Deanna is married to fellow mathematician Steve Kennedy, and together they have two children.

Fred Roberts, Rutgers University

Title: *Consensus List Colorings of Graphs and Physical Mapping of DNA*

Abstract: In graph coloring, one assigns a color to each vertex of a graph so that neighboring vertices get different colors. We shall talk about a consensus problem relating to graph coloring and discuss the applicability of the ideas to the DNA physical mapping problem. In many applications of graph coloring, one gathers data about the acceptable colors at each vertex. A list coloring is a graph coloring so that the color assigned to each vertex belongs to the list of acceptable colors associated with that vertex. We consider the situation where a list coloring cannot be found. If the data contained in the lists associated with each vertex are made available to individuals associated with the vertices, it is possible that the individuals can modify their lists through trades or exchanges until the group of individuals reaches a set of lists for which a list coloring exists. We describe several models under which such a consensus set of lists might be attained. In the physical mapping application, the lists consist of the sets of possible copies of a target DNA molecule from which a given clone was obtained.

Biography: Dr. Fred Roberts is currently a Professor of Mathematics at Rutgers University. He serves as the director of DIMACS, an NSF "science and technology center" founded in 1988 which is a consortium of Rutgers and Princeton Universities, AT&T Labs, Bell Labs (Lucent Technologies), NEC Laboratories America and Telcordia Technologies. He also serves as Director of DyDAn, Homeland Security Center for Dynamic Data Analysis. DyDAn was founded as a Department of Homeland Security Center of Excellence in 2006 and is a consortium of Rutgers,

(Continued on page 9)

Princeton, Rensselaer Polytechnic Institute, Texas Southern University, Texas State University-San Marcos, AT&T Labs, and Bell Labs.

Dr. Roberts' major areas of interests are mathematical models in the social, behavioral, biological, and environmental sciences and of problems of communications and transportation; graph theory and combinatorics; measurement theory; operations research; utility, decision making, and social choice; mathematical modeling and decision making for homeland security. He has author or co-authored 5 books, edited 17 others, and written over 150 professional journal articles.

In recent years Dr. Roberts briefed members of Congress, highlighting contributions of the mathematical sciences to emergency preparedness, disaster prevention, and related security matters. He also led a U.S. delegation to China for the opening of NSF's new Beijing office and for a conference on "Understanding China's Higher Education and Research in Computer Science and Information Technology."

James Sellers, Penn State University

(2006 Allegheny Mountain Section Teaching Award Winner)

Title: *Research in Integer Partitions: Alive and Well*

Abstract: Since my early days of graduate school, I have been fascinated by integer partitions. As with many other areas of mathematics, partition theory provides a number of easily-phrased questions (that elementary school students can understand) whose answers are either deep or (currently) non-existent. In this talk, I will gently introduce you to the basics of the subject and discuss some of the people who have inspired research in the field over the last several years. I will also prove some well-known partition-theoretic results, including Euler's famous result that the number of partitions of an integer n into odd parts equals the number of partitions of n into distinct parts. This result is approximately 250 years old, but is by no means "dead". I will demonstrate some results related to this one which have arisen quite recently (within the last year). My hope is that all will find this talk refreshing and that some will be spurred on to future studies in partitions.

Biography: James Sellers received his BS from the University of Texas at San Antonio in 1987 and his PhD in mathematics from Penn State University in 1992. Currently, he is Director of Undergraduate Mathematics and an associate professor of mathematics at Penn State. Sellers is passionate about research in combinatorics and partitions, and truly enjoys getting his undergraduate students involved in such endeavors (especially as undergraduate co-authors). Sellers also enjoys serving the mathematical community as a whole - he is currently the "webmaster" for the Allegheny Mountain Section of the MAA, a member of the CUPM and the Committee on Web Policy for the national MAA, and active in both section and national NExT activities. Of course, he also enjoys spending lots of time with his lovely wife Mary (also a Penn State grad) and their five wonderful children.

We often hear that mathematics consists mainly of "proving theorems." Is a writer's job mainly that of "writing sentences"? — Gian-carlo Rota

News from the CampusesAlderson-Broadus College*Submitted by Nick Loudin*

Dr. **Nicholas Loudin** retired as of August 2007 after 42 years of service. Mrs. **Jennifer Ellison** and Mrs. **Sarah Stevens** were appointed Assistant Professors of Mathematics.

Penn State-Greater Allegheny*Submitted by Zhibo Chen*

Dr. **Michael Stubna** joined us as a mathematics instructor at the Greater Allegheny campus (previously called McKeesport campus) of Penn State University this past fall. Dr. Stubna received his Ph.D from Cornell University. Professor **Zhibo Chen** conducted sabbatical research in Fall 2006 at Xiamen University of China.

Saint Vincent College*Submitted by Michael Botsko*

Dr. **Daniele Arcara** joined the Department in the fall of 2006 with an interest in Algebraic Geometry, having recently completed a post-doc at the University of Utah. He has replaced Dr. **Richard Gosser**, who was on the faculty for more than 30 years. Daniele will be teaching courses in Abstract Algebra and Engineering Statics and Dynamics. He gave an invited address in his field this past fall at Rice University and has also given presentations at the 2005 AMS Fall Western Section Meeting in Eugene, Oregon, and at the Workshop on Moduli Space of Curves at the University of Michigan at Ann Arbor in the spring of 2006.

Dr. **Michael Botsko**, chair of the Department, has had the following problems and/or solutions published:

Problems 11207 and 11232, and a solution to Problem 11166 in *The American Mathematical Monthly*

Q960/A960, Q961/A961, and Q966/A966 in

Mathematics Magazine

In addition, Dr. Botsko will have an article in the *Monthly* coming out in March.

Brother **Norman Hipps** and Mr. **Larry Mismas** continue to be active in the Math Science Partnership for which Brother Norman serves as campus director.

Butler County Community College*Submitted by Cheryl Cavaliero*

Madhu Motha is our newest full-time mathematics instructor. This is his second year at BCCC.

Wheeling Jesuit University*Submitted by Ted Erickson*

Ted Erickson has been promoted to Professor of Mathematics at Wheeling Jesuit University. Ted has been at WJU since 1980.

Juniata College*Submitted by John Bukowski*

Now that we have all recovered from hosting last year's spring section meeting, Juniata College is pleased to welcome three new faculty members in mathematics. **Kimberly Roth** (Ph.D., Penn State, 2002) is our new tenure-track applied mathematician, while **Ron Walker** (Ph.D., Michigan, 2003) and **Henry Escuadro** (Ph.D., Western Michigan, 2006) are joining us for a year. **Jerry Kruse** spent the fall semester in Steinfurt, Germany, teaching computer science at the Fachhochschule Münster. Now that he has returned, he is on sabbatical, as is **Cathy Stenson**. Despite a year with three searches, a program review, and a section meeting, the highlight of 2006 for **John Bukowski** was getting to perform the first movement (Allegro) of the Piano Concerto No. 12 in A, K. 414, by Mozart, with an orchestra in April.

University of Pittsburgh-Titusville*Submitted by Paul R. Bouthellier*

Dr. **Saeed Dubas** has had the paper “Efficient, High Order Scheme for the Heated Cavity Problem,” accepted for publication in the International Journal of Applied Science and Computation. Co-authors: **David Schultz**, **Paul Bouthellier**, and **Nihal Siriwardana**.

Dr. Dubas and Dr. Bouthellier are currently working on the paper “A Finite Difference Scheme for Viscous, Incompressible Flow between Two Rotating Spheres.”

Dr. **James Henderson** has presented “Teaching Evolution to Creationists” at the Pennsylvania Sociology Society 56th Annual Conference, “Catching the Tortoise: A Case Study in the Rules of Mathematical Engagement” at the AMS/MAA National Conference, and “Locality and Non-Locality in the Many-Minds Interpretation of Quantum Mechanics” has been accepted for presentation at the American Philosophy Association Central Division Meeting.

Dr. Paul Bouthellier has presented “The Quaternion Debate-From Hamilton to Computer Graphics” at the Midwest History of Mathematics Conference, “The Eigenvectors and Eigenvalues of Time-Varying ARMA Models” at the 43rd Annual Allerton Conference on Communication, Control, and Computing, and the trio “Mathematical Modeling for Game Design” (with Saeed Dubas), “Using Actionscript to Study the Stability of Time-Varying ARMA Models” (with Saeed Dubas), and “Mathematically Modeling a Galaxy and a Snowfall” at the 18th Annual International Conference on Technology in College Mathematics. “Buffon’s Needle Problem Generalized” and “Creating 3D Animations in Flash Using Mathematical Modeling” (both with **Melanie Anderson**) have been accepted for presentation and publication at the 19th Annual International Conference on Technology in

College Mathematics.

Penn State-Erie Behrend*Submitted by Michelle Previte*

Penn State Behrend welcomes Lecturer **Courtney Nagle** to our faculty. **Paul Becker** was granted tenure and promoted to Associate Professor. **Joe Previte** is on sabbatical this semester. Penn State Behrend hosted the Midwest History of Mathematics Conference in October. We had a string of girls born to faculty within the department: In March, **Dave Falvo** and his wife welcomed their first child, Sofia. In April, **Mike Rutter** and his wife had Alix, their second. In July, Joe and **Michelle Previte** had Leah Rose, their third.

Participants from the REU in Mathematical Biology had an article published in a refereed journal. Also, REU participant and Penn State Behrend student **Malorie Winters** won a prize for her poster at the Joint Meetings in New Orleans. Another REU participant, **Britany Parker** (from Mercyhurst College) won an award for her presentation at an international conference in Portugal.

Clarion University*Submitted by Ben Freed*

We hired a number of part-time temporary faculty to teach for us this year. They are **Marcy Isacco**, **Tim LaVan**, **Wendy McKain**, and **Brad Wagner**. **Steve Gendler** and **Dave Hipfel** are on sabbatical leave: Steve is taking classes and brushing up on his statistics in order to teach our elementary applied statistics course. Dave is studying for the actuarial exams. Having passed several of them already, he is close to becoming an Associate of the Society of Actuaries.

In January **Jim Reynolds** and his co-author **Ron Harshbarger** had the 8th edition of their popular book Mathematical Applications for the Management, Life, and Social Sciences published by Houghton Mifflin. **Elaine Carbone** and graduate students **Bar-**

bara Smith, Shawna Mukavetz, and Marlene Smith spoke at the PCTM Conference in Seven Springs. Each contributed to the presentation, "Practicing with our Students for Superior Achievement."

Mike McConnell and **Jon Beal** will be speaking at the upcoming ICTCM meeting in Boston. Mike will be teaching a minicourse in Camtasia Studio and giving a presentation on using flash movies in teaching modern algebra. Jon will be giving a calculator workshop using computer algebra systems to help students mature mathematically.

Two of our former students, **Jill Reese** and **Doug Puharic**, received doctoral degrees this past year. Jill completed her Ph.D. in applied mathematics at North Carolina State University and is currently doing a postdoc at Florida State University in Computational Science. Doug earned his Ph.D. in algebra at Bowling Green State University and is currently a faculty member at Edinboro University.

Thiel College

Submitted by Andrew Grover

This year, we hired Dr. **Jeonghun Kim** from LSU; Dr. **Mervin Newton** was promoted to Interim Dean of the Faculty here at Thiel.

Slippery Rock University

Submitted by Bob Vallin

Things are going well at SRU. First, congratulations to **Bob Vallin** and **Lyn Miller**! This fall Bob was promoted to full professor and Lyn earned her tenure. We are happy to welcome back **Gary Grabner** who spent the last year on sabbatical. Lyn Miller spent part of her summer at the George Washington University Summer Program for Women in Mathematics where she taught an Introduction to Gröbner Bases. We are also proud to announce that the scholarship in the name of Professor Emeritus **Anthony Pagan** is now fully-funded.

On the student side, our Mathematical Modeling Team earned a Meritorious ranking at the last Mathematical Contest in Modeling. The team, consisting of **T.J. Deems**, **Josh Harpst**, and **Pete Schallot**, then took their act on the road, giving a talk at Youngstown State University on how they came up with their optimal strategy for

Birth Announcement: It's a SIGMAA!!!!

We are proud to announce the arrival of a new Special Interest Group of the Mathematical Association of America, on Mathematical and Computational Biology, to be known as BIO SIGMAA. This SIGMAA was officially born at MathFest in August, after the usual 9-month gestation period.

The focus of BIO SIGMAA is on the pedagogy of mathematical and computational biology at the undergraduate level. This includes the support of curriculum development, faculty development, and undergraduate research in those fields. The purpose of BIO SIGMAA is to support those activities that will enhance the exchange of ideas and access to educational opportunities among undergraduates and undergraduate faculty in the fields of mathematical and computational biology. This necessarily includes interaction with all concerned departmental structures (i.e. mathematics, computer science, biology, and other related departments) and also institutions and organizations that feed into, and from, the undergraduate programs.

If you have any questions regarding membership in BIO SIGMAA or the goals and activities of BIO SIGMAA, please contact the BIO SIGMAA Chair, Eric Marland at marlandes@appstate.edu.

Allegheny Mountain Section Officers 2006-2007

Mike Berry, Chair

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Conference on Undergraduate Research in Mathematics

Penn State University, University Park, PA, November 9-10, 2007

Penn State University's Mathematics Department will host its 2007 Conference on Undergraduate Research in Mathematics on November 9-10, 2007. This conference will showcase mathematical research by undergraduate students through 15-minute contributed talks or posters. Financial support is available thanks to monies from various Penn State sources as well as the Mathematical Association of America through NSF grant DMS-0241090. Additional funding is also being pursued.

For more information and to register, please go to <http://www.math.psu.edu/ug/curm/conference07/>.

Please share this announcement with your undergraduates and their faculty mentors.

Questions? Contact the conference co-coordinators, James Sellers and Diane Henderson, at curm@math.psu.edu.

Allegheny Mountain Section Mathematical Association of America
Annual Spring Meeting - Talk Information Form
(online at http://www.math.psu.edu/sellersj/allegHENymtn/annual_meeting_2007/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.)

Equipment Needs — Please read carefully: *Each room is equipped with chalkboard (or whiteboard) and a projector which displays the output of an attached MS Windows computer. In addition, there is a port where the output from a laptop can be connected to the projector. The computers in each room have PowerPoint software, the Internet Explorer web-browser, USB ports, and CD-ROM drives. Overhead projectors, VCRs, etc., **may** be available with advance notification, but this is not guaranteed. **If you request additional technology or software, please provide a clear and comprehensive list of your needs; attach separately if needed.***

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:

Kim Roth
Department of Mathematics
Juniata College
Huntingdon, PA 16652

Talk Information Forms must be received by April 6, 2007.

Allegheny Mountain Section Mathematical Association of America
Annual Spring Meeting – Registration Form
 (online at http://www.math.psu.edu/sellersj/alleghenymtn/annual_meeting_2007/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

Special Registration (free)

- _____ Undergraduate Student
- _____ Graduate Student
- _____ Retired

* - 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 supporting Section NExT program? _____yes (\$5.00) _____no

Friday Evening Buffet? _____yes (\$16.00) _____no

Saturday Breakfast Buffet? _____yes (\$9.00) _____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 with this form to:
Ben Freed, Mathematics Department, Clarion University, Clarion, PA 16214.**

Deadline for submission of registration forms: April 6, 2007

Allegheny Mountain
Section, MAA

c/o Lyn Miller
Department of Mathematics
Slippery Rock University
Slippery Rock, PA 16057

Phone: 724-738-2878
Email: lyn.miller@sru.edu

ALLEGHENY MOUNTAIN SECTION ANNUAL MEETING

**APRIL 13-14, 2007, AT MERCYHURST COLLEGE,
ERIE, PA**

**Details
Inside!**

Deadlines:

To register: April 6, 2007

To give a talk: April 6, 2007

To book a reserved room: March 27, 2007