

### **PRESIDENT'S MESSAGE**

Spring really is coming, and with it, the promise of another exciting EPADEL meeting. We're looking forward to getting together at Lafayette College on April 16. Besides an outstanding slate of hour talks, organized by our section Vice President John Meier, and presentations by students, and book displays and sales, the meeting will feature the inaugural, invitational EPADEL Math Bowl, in which teams of undergraduates will compete for fabulous (well, nontrivial) prizes. So come on out for a nice respite after getting your income taxes done, and please encourage colleagues, undergraduates and graduate students to attend.

Some of the hour talks at this meeting will have a distinctly topological theme, but in different directions: the topology and geometry of reconfiguration (Robert Ghrist), and algebraic topology (Tara Brendle). Ed Burger of Williams College will speak on "Conjugate Coupling", and David Bressoud of Macalester College will talk about the new Curriculum Guide from the MAA Committee on Undergraduate Programs in Mathematics. We will also be presenting EPADEL's James Crawford Award for Distinguished Teaching to its 2005 winner.

Visit www.maa.org and check out some of the opportunities to participate in the national organization, and to learn about goings-on, particularly about this summer's MathFest in Albequerque from August 4-6.

See you April at Lafayette!

### **EPADEL GOVERNOR'S REPORT**

#### January 2005

The MAA Board of Governors met on January 4, 2005 in downtown Atlanta at the Joint Mathematics Meetings. The Associated Secretary reported that the 2004 Providence Mathfest was attended by over one thousand mathematicians, the most in the past eight years. The MAA Budget Committee recommended, and the Board of Governor's approved, a 2006 dues schedule with an increase of \$2 - \$7 in the various individual membership categories. The Budget Committee would like input on "principles for a restructured dues system for the future that not only would be more fair but would also recover a larger fraction of our costs." Please share any input you have on this matter with me through e-mail or at the spring meeting.

The Section Governors are regularly solicited for names of individuals who would like to serve on MAA committees. If you are interested in this important type of service to the national association, also let me know this by e-mail or in person at the spring meeting.

Section membership should also take advantage of MAA programs. PREP workshops, providing professional development opportunities, have been funded for five more years, and Project ACCCESS, a "Project NExT" type program for two-year college faculty is now underway. Learn about these and more in the Programs area of MAA Online.

Everyone should mark their calendars to attend the 2005 MathFest August 4 through 6. The MAA has made great strides to increase the number of mathematics talks at the meeting to balance the typically excellent programming in teaching-related issues. One particular program note is that EPADEL's own Annalisa Crannell will give the MAA Student Lecture in Albuquerque.

### **Dates of national meetings**

Joint Math Meetings	MathFests
Atlanta (1/5 - 1/8/05)	Albuquerque (8/4 - 8/6/05)
San Antonio (1/12 - 1/15/06)	Knoxville (8/4 - 8/6/05)
New Orleans (1/4 - 1/7/07)	San Jose (8/3 - 8/5/07)
San Diego (1/6 - 1/9/08)	Madison (7/31 - 8/2/08)
Washington (1/7 - 1/10/09)	
San Francisco (1/6 - 1/9/10)	
New Orleans (1/5 - 1/8/11)	

### JAMES P. CRAWFORD EPADEL TEACHING AWARD

# Plan now to nominate a colleague for next year's James P. Crawford EPADEL Teaching Award.

There are many excellent teachers of mathematics, but to be recognized by the MAA, they must be nominated by their colleagues.

Please consider nominating a colleague, a respected former teacher, or an inspiring speaker for the 2006 James P. Crawford EPADEL Section Award for Distinguished College or University Teaching. The nomination process is two-tiered. To initiate a nomination, the nominator must submit a one-page nomination form by **December 1, 2005**. The Selection Committee will screen the nominations, and around January 1 will invite some of the nominators to submit full nomination packets. The full packets should be completed with the help of the nominee's department chair, and submitted by February 1, 2006.

Guidelines for nomination and the latest nomination form are available for download at www.math.upenn.edu/~epadel/crawford\_instructions.htm or from

Barbara Bendl University of the Sciences in Philadelphia 600 South 43rd Street Philadelphia PA 19104-4495, Telephone: 215-895-1120, email: b.bendl@usip.edu.

### Congratulations to Marvin Brubaker, 2004 James P. Crawford EPADEL Teaching Award winner.

### **PROJECT NEXT-EPADEL**

### **NExT Fellows in EPADEL**

Project NExT (New Experiences in Teaching), a MAA program for new or recent Ph.D.s in the mathematical sciences who are interested in improving the teaching and learning of undergraduate mathematics, has accepted another enthusiastic group of fellows for the 2004-2005 year. The fellows attend special programs at two summer MathFests and at the Joint Mathematics Meeting in January. We welcome two new NExT fellows to EPADEL:

- Kathi Crow, Gettysburg College, Gettysburg, PA
- Trisha Moller, DeSales University, Center Valley, PA

#### **Project NExT-EPADEL**

In Spring 2002 EPADEL launched a regional version of the National Project NExT program, Project NExT-EPADEL. Faculty members in our section who are within their first three years of teaching full time at a university, four-year or two-year college are invited to apply to become Project NExT-EPADEL Fellows. In addition, Ph.D. students in our section who are within one year of completing their degree are invited to apply.

The next meeting for the NExT-EPADEL Fellows will be immediately following the spring section meeting at Lafayette. We will begin after the social hour that follows the meeting and continue through dinner. The workshop is open to all section and national NExT fellows, and anyone else interested in this year's topic. Everyone is invited to stay for dinner, which will be provided free for the new NExT-EPADEL Section Fellows.

At the workshop, participants will discuss topics of special relevance to beginning faculty. NExT-EPADEL Fellows will remain in contact with one another via an electronic mailing list. The focus of this year's workshop will be on extra-curriculum activities for Mathematics Majors.

For more information please see the NExT-EPADEL web page, www.ship.edu/ $\sim$ deensl/NExT-EPADEL/

All other inquires can be directed to either Lisa Marano, lmarano@wcupa.edu, or Kate Mc-Givney, kgmcgi@ship.edu.

### **ATTENTION GRADUATE AND UNDERGRADUATE STUDENTS**

The EPADEL Section's Spring Meeting will be held at Lafayette College on April 16. A detailed program can be found elsewhere in this Newsletter. Become involved with the regional mathematics community and attend this meeting! The registration fee for students is only \$5.

In addition to the invited talks, there will be a **Math Bowl** organized by Lafayette College students. There will also be two student contributed papers sessions in which graduate and undergraduate students have an opportunity to give a mathematics talk.

If you are interested in participating as a speaker, please check the Section's webpage at www.maa.org/epadel. The deadline to submit an application to give a talk is **April 1**.

#### 2005 Student Mathematical Paper Competition

If you are an undergraduate writing a mathematics paper this year, consider submitting it for a prize: The EPADEL Section's Student Mathematical Papers Prize Competition deadline is May 15, 2005 and the nationally sponsored Brennie and Frank Morgan Prize paper contest deadline is June 30, 2005.

Submissions for EPADEL's paper contest should be sent to:

Samir Ouzomgi Department of Mathematics Penn State-Abington College Abington, PA 19001 (215) 881-7300 FAX: (215) 881-7333 email: ouzomgi@psu.edu

The papers will be judged over the summer. The winning author(s) will be recognized at the MAA EPADEL Section's Fall 2005 meeting, and will receive a prize of \$200.

#### The National Meeting

In early August, Mathfest (the MAA national meeting) will be held in Albuquerque, New Mexico. Mathfest includes many activities of interest to students. For information on Mathfest check MAA Online at www.maa.org.

#### MAA Student Chapters

Do you have an MAA Student Chapter on your campus? If you don't, consider starting one. You'll need a minimum of five students and a faculty advisor. For information contact Alicia Sevilla, EPADEL Student Chapters Coordinator, at sevillaa@moravian.edu.

#### **Careers Conference**

The biannual EPADEL's Student Mathematics Careers Conference is scheduled for October 29, 2005 at Moravian College. Mark your calendars and plan to attend. You do not want to miss it!

## SCHEDULE FOR THE SPRING MEETING AT LAFAYETTE COLLEGE

# April 16, 2005

# Morning

Registration	8:30-10:00
Pfenning Alumni Center Lobby	
Welcoming Remarks	9:00-9:10
224 Oechsle Hall	
Math Bowl	9:10-10:00
An Undergraduate, Team Competition	
224 Oechsle Hall	
Coffee, Snacks break & MAA book display	10:00-10:30
Oechsle Hall Lobby	
The topology and geometry of reconfiguration	10:30-11:30
Robert Ghrist, University of Illinois	
224 Oechsle Hall	
Student Papers	10:30-11:30
For information on presenting a paper	
look in the student section of this newsletter	
211 & 223 Oechsle Hall	
Conjugate Coupling	11:30-12:30
Edward Burger, Williams College	
224 Oechsle Hall	
Business Meeting and the awarding of the Crawford Prize	12:30-12:45
224 Oeschsle Hall	
Lunch	12:45-2:00
Wilson Room of the Pfenning Alumni Center	

### Afternoon

Mapping class groups of surfaces: where algebra meets topology	2:00-3:00
Tara Brendle, Cornell University	
224 Oechsle Hall	
Student Papers	2:00-3:00
211 and 223 Oechsle Hall	
The CUPM Curriculum Guide 2004	3:00-4:00
David Bressoud, Macalester College	
224 Oechsle Hall	
Come Hour (For students)	3:00-4:00
Game Hour (For students)	
223 Oechsle Hall	
Social Time	4:00-4:30

### **Math Bowl**

Our Spring Conference opens with an activity that has become legendary in the Lafayette Mathematics department. We will have a contest, modeled on "College Bowl," between various local teams of undergraduates. Gary Gordon and Liz McMahon will be the hosts and official (completely unbiased) judges.

### **Game Hour**

At the end of the conference Lafayette College's Math Club will host a game hour, where all interested undergraduates are invited to come and enjoy a variety of games (bridge, chess, etc.).

 MAA
 SPRING
 MEETING
 BOOK
 SALE

 Assortment of Recent Titles for Examination
 SPECIAL DISCOUNT PRICES
 SPECIAL DISCOUNT PRICES

 Purchase Display Books & Enjoy Them Immediately
 Order Books Postage-Free
 II Get great books and benefit EPADEL simultaneously II

### **ABSTRACTS OF INVITED TALKS**

- The topology and geometry of reconfiguration, Robert Ghrist, University of Illinois
- Conjugate Coupling: The romantic adventures of the quintessential quadratic, Edward Burger, Williams College
- *Mapping class groups of surfaces: where algebra meets topology*, Tara Brendle, Cornell University
- The CUPM Curriculum Guide 2004, David Bressoud, Macalester College

### The topology and geometry of reconfiguration Robert Ghrist, University of Illinois

**Abstract:** There are numerous contexts in which 'states' need to be reconfigured – in robotics, manufacturing, protein folding, microfluidics, and group theory, among others. I'll demonstrate a geometric approach to reconfiguration which leads to very beautiful ideas in contemporary geometry and topology. Cube complexes and curvature will play a starring role in determining how to reconfigure a system optimally.

**Biography:** Robert Ghrist was born in Euclid, Ohio, presaging a disposition for geometry. Despite beginning professional life as a mechanical engineer (BSME, Univ. Toledo), the Fates prevailed and Ghrist became a mathematician (MS, Ph.D. in Applied Mathematics, Cornell Univ.). As an associate professor of Mathematics at the University of Illinois, Urbana-Champaign, Ghrist applies geometry and topology to problems in applied mathematics, engineering, and computer science. He lives in Urbana with his wife and three young children.

### *Conjugate Coupling: The romantic adventures of the quintessential quadratic* Edward Burger, Williams College

**Abstract:** Here we will come to understand the "personality" of real numbers. Along the way we will encounter some beautiful ideas from number theory and develop an appreciation for diophantine approximation. Results of both the ancient and recent variety will be offered along with some surprising reality-TV style twists

**Biography:** 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 30 research articles and three books - "The Heart of Mathematics: An invitation to effective thinking", "Exploring the Number Jungle: A journey into diophantine analysis", and "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. In 2004 he was awarded Mathematical Association of America's Chauvenet Prize.

#### Mapping class groups of surfaces: where algebra meets topology Tara Brendle, Cornell University

**Abstract:** Mathematicians have known the classification of surfaces for over a century, so what could possibly be left to say about them? In mathematics, as soon as we have an object of interest, we also need to understand the maps of that object to itself which preserve the essential properties of that object. In topology, these "nice" maps are called homeomorphisms. The mapping class group of a surface is the group of homeomorphisms of a surface to itself (up to a certain equivalence relation). The mapping class group arises in many fields of mathematics, including complex analysis, algebraic geometry, geometric group theory, low-dimensional topology, and even in the proof of Fermat's Last Theorem.

Despite its fundamental nature, the algebraic structure of mapping class groups is not yet fully understood. In this talk, we will discuss various known generating sets for mapping class groups which possess very different properties: some arise from the symmetry of surfaces, whereas others correspond to "twisting" a surface, much the way one twists a Rubik's cube. Thus, perhaps counter to our intuition, we will see that symmetries can be understood as resulting from a series of twists, and vice-versa.

**Biography:** Tara Brendle grew up in Mercersburg, Pennsylvania. She received her B.S. from Haverford College, and her M.A. and Ph.D. from Columbia University. She is in her 3rd year of a VIGRE postdoc at Cornell University in Ithaca, NY. Her research interests include geometric group theory and low-dimensional topology.

Tara has been involved in the EDGE Program (Enhancing Diversity in Graduate Education), a summer program for women at the beginning stages of a graduate program in mathematics, first as a graduate student mentor and later as a short course instructor and visiting speaker. She will also be teaching an undergraduate course in geometric group theory at this year's Program for Women in Mathematics at the Institute for Advanced Studies in Princeton.

#### *The CUPM Curriculum Guide 2004* **David Bressoud, Macalester College**

**Abstract:** The MAA Committee on the Undergraduate Program in Mathematics (CUPM) updates its recommendation for the undergraduate curriculum in mathematics roughly every ten years. The most recent and the most extensive set of recommendations ever produced by the CUPM was published in February, 2004. This is the first CUPM curriculum guide to look at all mathematics courses and the needs of all students taking mathematics rather than dealing solely with the preparation of majors in the mathematical sciences. This session will explain what can be found in this guide, suggest how it can be used, raise some issues about college calculus, and listen to your concerns about the undergraduate curriculum.

**BioGraphy:** David Bressoud is DeWitt Wallace Professor of Mathematics at Macalester College in St. Paul, Minnesota. He grew up in Bethlehem (graduating from Liberty in 1968), went to Swarthmore, spent two years in the Peace Corps (Antigua, West Indies), then went to Temple University where he studied with Emil Grosswald. He taught at Penn State from 1977 until 1994 when he emigrated to Minnesota. He has received the MAA Distinguished Teaching Award and the MAA's Beckenbach Book Award for "Proofs and Confirmations: The Story of the Alternating

Sign Matrix Conjecture" and has been an MAA Polya Lecturer. He currently serves as Chair of the College Board's AP Calculus Development Committee, Chair of the MAA's Committee on the Undergraduate Program in Mathematics, and as Director of Macalester's FIPSE- and NSF-sponsored program "Quantitative Methods for Public Policy."

# **UPCOMING EVENTS**

- Viewpoints Workshop: Viewpoints is a workshop on math and art to be run June 12-17, 2005 at Franklin & Marshall College. For more information visit their web site (mypage.iu.edu/ mathart/viewpoints/).
- **Careers conference**: The biannual EPADEL Student Mathematics Careers Conference is scheduled for October 29, 2005 at Moravian College.

### Other mathematics meetings in the region

- The spring 2005 MAA-NJ meeting will be held at Middlesex County College on April 2, 2005, coinciding with the 2nd Annual Garden State Undergraduate Math Conference. Visit their website (www.maa.org/newjersey) for more information.
- The joint PSMATYC/WVMATYC meeting will be held tentatively on April 8-9, 2005 at the Boyce Campus, Community College of Allegheny County, Monroeville, Pa. Visit their website (www.hacc.edu/psmatyc/) for more information.

### **EPaDel Spring Meeting – April 16, 2005** Lafayette College REGISTRATION FORM

Name:					First time attendee?
Email:					🗆 Yes 🗆 No
School:					
Status:	□ Stud	ent, Unde	ergraduate	□ Student, Graduate	□ Emeritus
	🗆 Higł	n School I	nstructor	□ 2-year College Faculty	□ 4-year Faculty
Registrati	on Fee:		(full-time	n-site) emeriti, and unemployed) faculty who are attendees)	\$
I	Lunch*:	\$10.00			\$
Total: \$ *Lunch reservations are limited to the first 100 registrants.				\$	
Send your registration forms to:					

Pat Pappus EPaDel Spring Meeting Registration Department of Mathematics Lafayette College Easton, PA 18042

### PRE-REGISTRATION DEADLINE APRIL 1, 2005

### DIRECTIONS

#### From the west:

Take route 22 east to the 4th street exit, Easton (marked for Lafayette College). At foot of ramp, turn left; left again at first stop light (3rd St., then College Avenue). At the top of the hill, take first left (McCartney St.). Left again at first stop sign (High St.). Go 1 1/2 blocks, take second right onto parking deck, located behind Markle Hall. Registration is in Pfenning Alumni Center, building 51 on the campus map.

#### From the east:

Take 22 west to to Delaware River toll bridge. After exiting toll bridge, take second exit ramp, marked for Easton and Lafayette College. At the end of the ramp, turn right onto Third Street which becomes College Ave. At top of hill, take first left (McCartney St.) to first stop sign (High St.). Turn left. Go 1 1/2 blocks, take second right onto parking deck, located behind Markle Hall. Registration is in Pfenning Alumni Center, building 51 on the campus map.

#### **Numeric Key: Buildings**

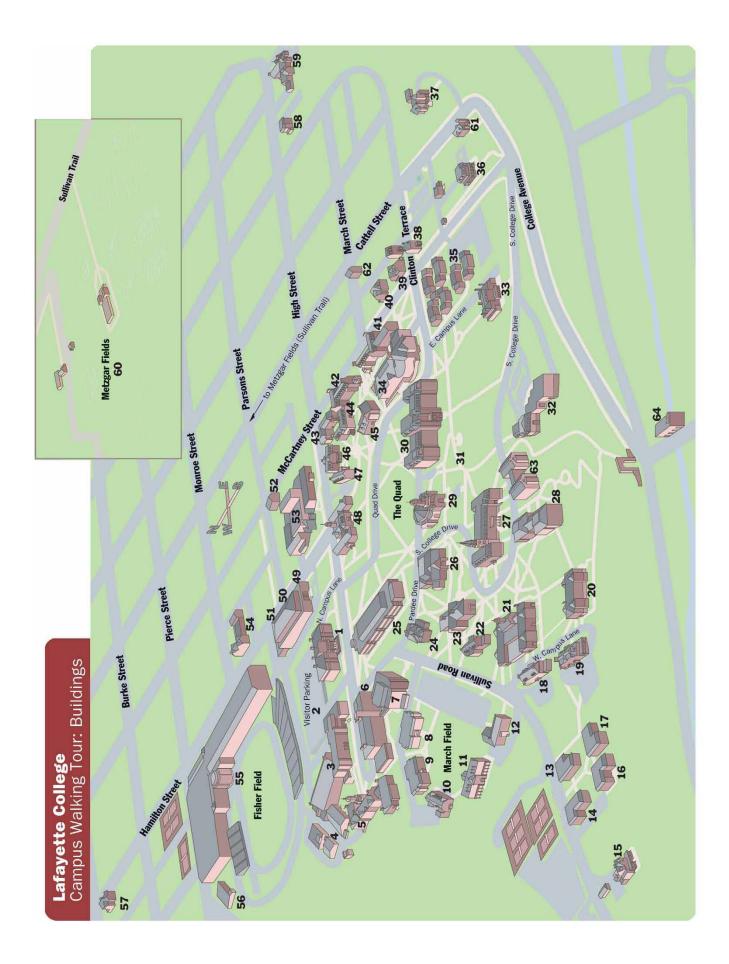
To tour Lafayette's buildings, park in the Visitor's Parking lot behind Markle 22 718 Sullivan Trail Hall. Begin your tour in front of Markle Hall. To tour Lafayette's trees, see pages 3 and 4 of this document.

- 1 Markle Hall
- 2 Parking Deck
- 3 Acopian Engineering Center
- 4 Plant Operations
- 5 Watson Hall
- 6 Hugel Science Center
- 7 Kunkel Hall
- 8 Farber Hall
- 9 Ramer Hall
- 10 Phi Kappa Psi fraternity
- 11 Delta Kappa Epsilon fraternity 12 Lerch House (Kappa Kappa
- Gamma sorority) 13 P T Farinon House
- 14 Conway House
- 15 Sullivan House (Alpha Gamma
- Delta sorority)
- **16** Alpha Phi sorority
- 17 Pi Beta Phi sorority
- 18 Two West
- 19 Chi Phi fraternity

- 20 Easton Hall
- 21 Marguis Hall
- 23 Kirby Hall of Civil Rights 24 Delta Upsilon fraternity
- (Phi Delta Theta House) 25 Skillman Library
- 26 Van Wickle Hall
- 27 South College-Jesser Hall
- 28 Ruef Hall
- 29 Colton Chapel
- 30 Pardee Hall
- 31 Société d'Honneur Plaza
- 32 William E. Simon Center for Economics and **Business Administration**
- 33 Zeta Psi fraternity
- **34** William B. Farinon College Center **60**
- 35 Watson Courts
- 36 President's House
- 37 Fretz House
- 38 Hillel House
- 39 David A. Portlock Black Cultural Center
- 40 Newman House
- 41 McKeen Hall
- 42 Gates Hall
- 43 Bailey Health Center
- 44 Soles Hall

- 45 Hogg Hall
- 46 Phi Gamma Delta fraternity
- 47 Kappa Delta Rho fraternity
- 48 Kirby House
- 49 Alumni Memorial Plaza
- 50 **Oechsle Hall**
- 51 Pfenning Alumni Center
- 52 Lehigh Valley Child Care Center
- Morris R. Williams 53 Center for the Arts
- 54 Printmaking Studios
- 55 Allan P. Kirby Sports Center
- 56 Maroon Club Strength Center
- 57 Hamilton House (Delta Gamma) sorority)
- 58 Reeder House (Theta Chi fraternity)
- 59 McKelvy House
- McCracken Field House
- 61 511 College Avenue
- 62 Military Science
- 63 Keefe Hall
- 64 Williams Visual Arts Building

03/02



# **EPADEL OFFICERS AND EXECUTIVE COMMITTEE MEMBERS**

### Officers

President	Vice President	Secretary-Treasurer
Dennis DeTurck (2004) Department of Mathematics University of Pennsylvania 209 S. 33rd St. Philadelphia, PA 19104-6395 (215) 573-9036 deturck@math.upenn.edu	John Meier (2004) Department of Mathematics Lafayette College Easton, PA 18042 (610) 330-5570 meierj@lafayette.edu	Barbara Bendl University of the Sciences in Philadelphia 600 South 43rd Street Philadelphia, PA 19104-4495 (215) 895-1112 email: b.reilly@usip.edu
Section Governor Douglas Ensley (2007) Shippensburg University of Penn- sylvania Department of Mathematics Shippensburg, PA 17257-9749 (717) 477-1477 email: deensl@ark.ship.edu	Governor Ex-Officio (Chair, Committee on Sec- tions) Nancy Hagelgans (2007) Department of Mathematics Ursinus College Collegeville, PA 19426-1000 (610) 489-4111 email: Nhagelgans@ursinus.edu	

# **Committee Members at Large**

James Fink (2005)	Linda McGuire (2005)	Robert Styer(2006)
Department of Computer Science	Department of Mathematics	Department of Mathematics
Gettysburg College	Muhlenberg College	Villanova University
300 N Washington Street	2400 W. Chew Street	800 Lancaster Avenue
Gettysburg, PA 17325-1486	Allentown, PA 18104	Villanova, PA 19085-1699
(717) 337-6630	(484) 664-3351	(610) 519-4850
email: jfink@gettysburg.edu	email: lmcguire@muhlenberg.edu	email: robert.styer@villanova.edu
Mazen Shahin (2006)	Joanne Darken (2007)	Steven H. Weintraub (2007)
Delaware State University	Department of Mathematics	Department of Mathematics
Department of Mathematics	Bonnell B2-22G	Lehigh University
1200 N Dupont Highway	Community College of Philadel-	Bethlehem, PA 18015-3174
Dover, DE 19901	phia	(610)-758-3730
(302) 857-7055	1700 Spring Garden St.	Fax: (610)-758-3767
email: mshahin@desu.edu	Philadelphia, PA 19130	email: shw2@lehigh.edu
	(215) 751-8721	
	email: jdarken@ccp.edu	

## **Other Members**

Newsletter Editor	<b>Public Information Officer</b>	EPADEL Webmaster
Michael Fraboni	Trisha Moller	Jerry Porter
Department of Math/CS	Department of Mathematics	Department of Mathematics
Moravian College	DeSales University	University of Pennsylvania
Bethlehem, PA, 18018-6650	Center Valley, PA	209 S. 33rd Street
(610) 861-1605	(610) 282-1100 ext 1681	Philadelphia, PA 19104-6395
email: mfraboni@moravian.edu	email: trisha.moller@desales.edu	(215) 898- 8467
eman. mirabom@moravian.edu	eman. misna.moner@desales.edu	email: GJPorter@math.upenn.edu
		email. Off orter@mail.upenil.edu
Student Chapter Coordina-	MAA Book Display Coordi-	Section NExT Coordina-
tor	nator	tors
Alicia Sevilla	Amy Kimchuk	Kate McGivney
Department of Mathematics	Univ of the Sciences in Philadel-	Shippensburg University of Penn-
Moravian College	phia	sylvania
1200 Main Street	600 South 43rd Street	Department of Mathematics
Bethlehem, PA 18018	Philadelphia, PA 19104-4495	Shippensburg, PA 17257-9749
email: sevillaA@moravian.edu	(215) 596-8705	(717) 477-1490
ennam sevinarie moravianeau	email: a.kimchu@usip.edu	email: kgmcgi@ship.edu
		emani aginegi e sinpieda
		Lisa Marano
		West Chester Univ of Pa
		West Chester, PA
		(610)-738-9499
		email: lmarano@wcupa.edu
		eman: marano e weapa.edu
Student Paper Competition	Student Speaker Coordina-	Workshop Coordinator
Coordinator	tor	Marvin L. Brubaker
		Department of Mathematical Sci-
Samir Ouzomgi	Eric Egge	ences
Department of Mathematics	Department of Mathematics	Messiah College
Penn State-Abington College	Gettysburg College	Grantham, PA 17027
Abington, PA 19001	300 North Washington Street	(717) 766-2511, ext. 3790
(215) 881-7300	Gettysburg, Pennsylvania 17325	
email: ouzomgi@psu.edu	(717) 337-6655	email: mbrubake@messiah.edu
	(717) 337-6655 email: eegge@gettysburg.edu	
	(717) 337-6655 email: eegge@gettysburg.edu Speaker and Consultant	
	(717) 337-6655 email: eegge@gettysburg.edu Speaker and Consultant Program	
	(717) 337-6655 email: eegge@gettysburg.edu Speaker and Consultant Program John Polhill	
	(717) 337-6655 email: eegge@gettysburg.edu Speaker and Consultant Program John Polhill Department of Mathematics and	
	(717) 337-6655 email: eegge@gettysburg.edu Speaker and Consultant Program John Polhill Department of Mathematics and Computer Science	
	(717) 337-6655 email: eegge@gettysburg.edu Speaker and Consultant Program John Polhill Department of Mathematics and Computer Science Bloomsburg University	
	(717) 337-6655 email: eegge@gettysburg.edu Speaker and Consultant Program John Polhill Department of Mathematics and Computer Science Bloomsburg University Bloomsburg, PA 17815	
	(717) 337-6655 email: eegge@gettysburg.edu Speaker and Consultant Program John Polhill Department of Mathematics and Computer Science Bloomsburg University	

# Student Contributed Talks Cover Page

This cover page **MUST** be included as part of the application for giving a student contributed talk. Responses to these questions will not affect eligibility for acceptance of a presentation. All personal information will be kept confidential.

Please type or print clearly.

Name	Faculty Sponsor				
Email	Institutional Affiliation				
Class Year (check one) HS	FR	SO	JR	SR	Grad Student
Mailing Address					
Telephone					
Title of Talk (be concise)					
Category (check one)	Expository	M	athematical	l Activity	Research
Have you given this talk elsewhere?	' If so please spe	ecify whe	re and when	l.	
A blackboard, overhead projector for will be provided. Will your present	-	,	- /	•	
Do you have a preference for the so be guaranteed.)	cheduling of you	r talk? (I	Requests wi	ll be consid	lered, but cannot
	Morning		Afternoon		Does not matter
Send this $\mathbf{cover}\ \mathbf{page}$ and a $\mathbf{one}\ \mathbf{p}$	bage outline of	your talk	to		
Eric Egge Department of Mathema Gettysburg College	tics			eegge(	@gettysburg.edu

Deadline: Applications must be <u>received</u> by Friday, April 1, 2005.

Date Received:

For EPADEL Use

\_\_\_\_\_ Accepted \_\_\_\_\_ Rejected (give reason)

300 N. Washington Street Gettysburg, PA 17325