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Norman Richert, Editor
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University of Michigan
P.O. Box 8604
Ann Arbor, MI 48107-8604

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Michigan Section – MAA

NEWSLETTER

Volume 30, Number 2 **April 2004**

Michigan Section Annual Meeting
Oakland University
May 7–8, 2004

Coming to Rochester …

Margaret Wright
Direct Search Methods

Charlene Beckmann
Mathematicians are from Mars …

Karen Smith
Rational Algebraic Varieties

Michael Starbird
General Education Math Courses

Jerry Uhl
MathBC

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Mathematical Association of America
Michigan Section Newsletter
Volume 30, Number 2

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Editor: Norman Richert, Mathematical Reviews, P.O. Box 8604, Ann Arbor, MI 48107-8604; 734-996-5254; fax 734-996-2916, nrichert@ams.org.

Advertising Manager: Matthew Boelkins, Department of Mathematics and Statistics, Grand Valley State University, Allendale, MI 49401-9403; 616-331-3384; fax 616-331-3120, boelkinm@gvsu.edu.

www.michmaa.org

Abbreviations

C = College
CC = Community College
CMU = Central Michigan U
EMU = Eastern Michigan U
FSU = Ferris State U
GVSU = Grand Valley State U
KU = Kettering U
LSSU = Lake Superior State U
LTU = Lawrence Technological U
MSU = Michigan State U
MTU = Michigan Technological U
NMU = Northern Michigan U
OU = Oakland U
SHU = Siena Heights U
SVSU = Saginaw Valley State U
U = University
UDM = U of Detroit Mercy
UM = U of Michigan
WMU = Western Michigan U
WSU = Wayne State U

Calendar of Events

March 20, 2004	Conversations Among Colleagues, GVSU
April 22–24, 2004	NCTM Annual Meeting, Philadelphia
May 7–8, 2004	Michigan Section Meeting, OU, Rochester
August 12–14, 2004	MAA MathFest, Providence
October 1–2, 2004	MichMATYC Fall Conference, GRCC
October 30, 2004	MUMC, CMU
November 18–21, 2004	AMATYC Annual Meeting, Orlando
January 5–8, 2005	MAA/AMS Annual Meeting, Atlanta
April 7–9, 2005	NCTM Annual Meeting, Anaheim
April or May, 2005	Michigan Section Meeting, Alma C, Alma
August 4–6, 2005	MAA MathFest, Albuquerque
November 10–13, 2005	AMATYC Annual Meeting, San Diego
January 12–15, 2006	MAA/AMS Annual Meeting, San Antonio
April 26–29, 2006	NCTM Annual Meeting, St. Louis
April or May, 2006	Michigan Section Meeting, Calvin C, Gr. Rapids
August 10–12, 2006	MAA MathFest, Knoxville
November 15–18, 2006	AMATYC Annual Meeting, Cincinnati
January 4–7, 2007	MAA/AMS Annual Meeting, New Orleans
August 3–5, 2007	MAA MathFest, San Jose
January 6–9, 2008	MAA/AMS Annual Meeting, San Diego
January 7–10, 2009	MAA/AMS Annual Meeting, Washington, D.C.

Organizational Web sites

Michigan Section–MAA	www.michmaa.org
MAA	www.maa.org
NCTM	www.nctm.org
Michigan NCTM	www.mictm.org
AMATYC	www.amatyc.org.

Annual Meeting May 7–8

The annual meeting of the Michigan Section–MAA and MichMATYC (the Michigan Mathematical Association of Two-Year Colleges) will be held on Friday and Saturday, May 7–8, 2004 at Oakland University in Rochester, Michigan. This year's program promises an interesting and exciting mix of talks devoted to mathematics and the teaching of mathematics.

The meeting begins on Friday morning with a plenary address by **Margaret Wright** of the Courant Institute of Mathematical Sciences at New York University. Her title is "Direct search methods: the sound and the fuss." She will describe the latest results in the field of direct search methods (derivative-free algorithms for optimization) and will consider several interesting issues raised by those results. The Friday luncheon talk will be given by **Charlene Beckmann**, a member of the mathematics faculty at Grand Valley State University and Past President of the Michigan Council of Teachers of Mathematics. Her title is "Mathematicians are from Mars; mathematics educators are from Venus: what can we do to meet on planet Earth?" She will make an appeal for stronger working relationships between mathematicians and mathematics educators. On Saturday morning there will be a follow-up panel discussion in which various panelists share examples of successful collaborations between mathematicians and mathematics educators. On Friday afternoon **Karen Smith** of the University of Michigan will speak on "Rational Algebraic Varieties." She will address the question of when an algebraic variety can be parametrized. Her talk will include a review of concepts and a description of some of the most recent discoveries in the field.

The Friday evening banquet speaker is **Michael Starbird** of the University of Texas at Austin. He is co-author, with **Edward Burger**, of a successful textbook for a course in mathematics for liberal arts students. Mike will ask us to rethink the place of a mathematics course in the general education of students and will inspire us to teach courses that emphasize profound mathematical ideas and celebrate mathematical ways of thinking.

On Saturday morning, **Jerry Uhl** of the University of Illinois at Urbana-Champaign will speak on "MathBC: advancing interesting mathematics

before calculus." He will describe a new pre-college course that is designed to keep more students in mathematics so that they are prepared to study mathematics at the college level. The meeting concludes with a Saturday luncheon talk by **William Dunham** of Muhlenberg College. Bill is author of the widely acclaimed book *Journey Through Genius*. He will share some of his insights into the mathematical work of Leonhard Euler.

In addition to the plenary talks, we will have a variety of contributed talks on topics of interest from various areas of mathematics and on pedagogical issues related to particular courses. There will also be sessions devoted to talks by undergraduate and graduate students as well as book exhibits from the MAA and other publishers. Details about the schedule (including abstracts), registration, and accommodations are contained in the Program for the Annual Meeting, which is included with this *Newsletter*. The program is also available on the Section's web site, www.michmaa.org. **Please note that advance reservations for all meals must be made by April 23 and that hotel reservations must be made by April 16 in order to receive the conference rate. The deadline for submission of abstracts for student talks is April 23.**

The program committee for this year consists of co-chairs **Gerard Venema** (Calvin C) and **Scott Barnett** (HFCC) along with **Earl Fife** (Calvin C), **Deborah Loewenberg Ball** (UM-AA), and **Kevin Andrews** (OU). The local arrangements committee consists of **Jack Nachman** (chair), **Kevin Andrews**, **Eddie Cheng**, **Jerry Grossman**, and **Serge Kruk**.

I hope to see you in Rochester this May.

Gerard Venema, Four-Year College Vice Chair

Chairperson's Report

At the national level, the MAA has identified a need to get more graduate students involved in the organization. If graduate students participate in the MAA as students, it is likely they will carry on their participation when they become faculty. To this end, the MAA Committee on Graduate Students has offered grant support to sections to pilot programs that encourage graduate student involvement in section activities. **Matt Boelkins** (GVSU) applied for and received one of these grants. Matt and **John Clifford** (UM-Dearborn) are working on a special session to highlight graduate students at our annual meeting. Expect to see some new faces at the section meeting this May.

While we are on the subject of section meetings, locations for our meetings are fixed through May 2006. Of course, in 2004 we will be at Oakland University. In subsequent years the meetings are scheduled for Alma College

(2005) and Calvin College (2006). To continue the rotation, we should look for a site on the eastern side of the state for 2007. If you are interested in hosting the section meeting in 2007 or beyond, please let one of the section officers know.

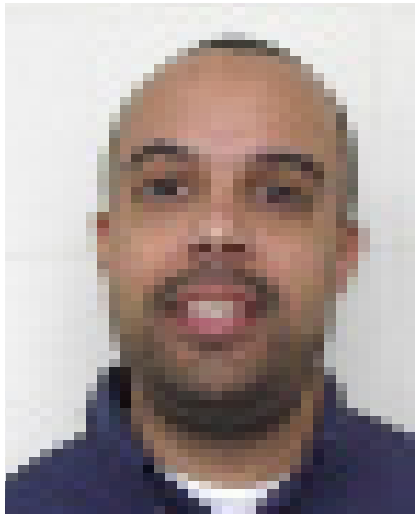
In March, the Michigan Section joined the Michigan Mathematics Teacher Educators (MMTE), the Michigan Council of Teachers of Mathematics (MCTM), and the Michigan Mathematical Association of Two-Year Colleges (MichMATYC) collaborated on the conference *Conversations Among Colleagues* at GVSU's DeVos Center in downtown Grand Rapids. The conference was designed to foster communication among the many parties responsible for the mathematics education of teachers—college and university mathematicians and mathematics educators, K–12 mathematics supervisors, curriculum directors, and classroom teachers who mentor teacher interns. Also supporting the conference were the MAA Preparing Mathematicians to Educate Teachers program, Grand Valley State University, the Center for Proficiency in Teaching Mathematics at the University of Michigan, and Michigan State University Division of Science and Mathematics Education.

John Kiltinen and **Sujay Datta** (both at NMU) organized the MAA Upper Peninsula Regional Fall Meeting, held at Northern Michigan University, November 7 and 8, 2003. **John Mooningham** (SVSU) and I attended and enjoyed the excellent talks and the chance to get to know our colleagues up north. Next year's upper peninsula meeting is planned for October at Lake Superior State University. **Brian Snyder**, **Sherilyn Duesing**, and **George Voutsadakis** (all at LSSU) make up the Local Arrangements Committee for the 2004 UP meeting.

Gerard Venema (Calvin C) and the Program Committee have put together what looks like an outstanding program for our annual meeting. You can learn the details in the program contained with this *Newsletter* or at the Mich-MAA Web site at www.michmaa.org. I look forward to seeing you at Oakland University!

Steve Schlicker, Chair

Two-Year College Vice Chair's Report



Perhaps the most important two-year-college-related news this year is the announcement of Project ACCCESS (Advancing Community College Careers: Education, Scholarship, and Service), a joint AMATYC and MAA initiative to encourage the professional development of new two-year college mathematics faculty. Similar to the goals of Project NExT for new PhD's in the mathematical sciences, the four stated objectives of Project ACCCESS are for its Fellows to

(1) gain knowledge of the culture and mission of the two-year college and its students;
(2) acquire familiarity with the scholarship of teaching;
(3) commit to continued growth in mathematics; and
(4) participate in professional communities.

The events for this Project will officially begin with the participation of Fellows in the AMATYC pre-conference workshop in Orlando in November 2004. Among their other Project-related activities, Fellows will also participate in regular and specially-designed activities at MAA Section meetings. The Michigan Section will need to work with Project coordinators and MichMATYC to provide such activities at future meetings.

Project ACCCESS is funded through a three-year grant from the ExxonMobil Foundation. More comprehensive information about the Project is available in the January 2004 issues of *Focus* and the *AMATYC News*. Application materials are to be available this spring at www.amatyc.org/ProjectACCCESS and www.maa.org/ProjectACCCESS. The deadline for applications is July 1.

Scott Barnett, Two-Year College Vice Chair

Oakland in May

Governor's Report

This is my last message to you as Governor. By the time you receive this *Newsletter*, you will have already elected the Governor for 2004–2007. Thank you again for the opportunity to serve, and best wishes to the new Governor.

One issue that concerns many of us is the quality of the high-stakes tests being used as part of No Child Left Behind. In Michigan, this is the MEAP. An article in last year's *Detroit Free Press* (and other state newspapers) revealed that the 2003 high school mathematics MEAP had a probability question for which none of the available choices was correct. The composers of the question didn't understand the subject they were testing! There is something you can do to help—volunteer to serve on the state's Content Advisory Committee. Twice a year about 15 mathematicians and educators gather for a few days in Lansing to review proposed questions for correctness and suitability. Expenses are paid (but, sadly, currently no honorarium), and it's a great chance to interact with colleagues, especially high school teachers and administrators. For more information, contact the director, **Kyle Ward** (517-335-7172, wardk2@michigan.gov).

There were few surprises at the Board of Governors meeting in Phoenix. As usual, dues were increased to keep up with inflation (about 3%). The organization remains healthy. Record book sales are expected once 2003 figures are in; the MAA published 20 new books last year, and you can buy some of them at our Annual Section Meeting in May. Some future meeting sites were selected (including San Francisco in January 2010).

One more nudge: There are dozens of really outstanding mathematics faculty members in institutions of higher education in Michigan. The Section honors one every year with its Distinguished Teaching Award. The selection committee needs more nominees! Talk to your department chair and put it on your calendar to nominate someone from your department next Fall.

I hope to see many of you at Oakland University May 7–8. And don't forget MathFest 2004, August 12–14, in Providence, RI.

Jerry Grossman, Governor

Secretary/Treasurer's Report

I would like to take this opportunity to thank everyone who sent in a dues payment. We currently have 154 individual dues-paying members and 26 institutional members. Of the 154 individual members, 58 have paid sustaining member dues of $30 or more. The lists of institutional members and sustaining members are on page 15 and 33, respectively. If you have not yet sent in your dues for 2003–2004, you can still do so with the membership form on page 15 or on the Web at www.michmaa.org/dues.html. Please check the list of institutional members. If your school is not listed, you might want to remind your department chair.

	3/'99	3/'00	3/'01	3/'02	3/'03	3/'04
regular members	100	97	115	102	103	96
sustaining members	44	53	61	60	60	58
institutional members	27	26	25	27	18	26

The Michigan Section's current bank balance is $8,300, which includes $1,748 committed to the Section's Project NExT. Last year's balance was $7,694, which included the grant for Project NExT. Income from advertisements in the Section's *Newsletter* is still coming in, and the cost for production of the *Newsletter* has been lower in recent years than in the past. We have a good balance of income and expenses and can consider the financial health of the Section as satisfactory.

Margret Höft, Secretary/Treasurer

New Officers to be Elected at Annual Meeting

The annual business meeting of the Michigan Section-MAA will take place at 5:00 p.m. on May 7, 2004 at Oakland University. One of the major items of business is the election of officers. The Nominating Committee, chaired by **John Mooningham** (SVSU), will propose a slate of candidates. **Gerard Venema** (Calvin C), currently the Four-Year College Vice-Chair, will, in keeping with tradition, be nominated for Chair. **John Fink** (Kalamazoo C) will be nominated for Four-Year College Vice-Chair. **Nancy Colwell** (SVSU) will be nominated for a three-year term as Secretary/Treasurer. Mark Naber (Monroe CCC) will be nominated for the Two-Year College Vice-Chair position. Nominations from the floor are also accepted (permission of the nominees should be secured in advance). The annual meeting will also have reports on Section activities during the year, as well as an opportunity for members to raise other issues.

Positions Available

NOTE: Most positions in the mathematical sciences, including many of the ones listed here, are advertised in Employment Information in the Mathematical Sciences *(www.ams.org/eims). The MAA also has a Web site for employment opportunities (www.maa.org/pubs/employ.html). All openings are for Fall 2004 unless otherwise stated, and further information is available from the department.*

Albion College is searching to fill a one-year sabbatical replacement position in mathematics.

Lawrence Technological University is looking for a director for its developmental mathematics efforts. Contact David Bindschadler (mcschair@ltu.edu).

Grand Valley State University (www.gvsu.edu/math/jobs.html) is seeking to fill positions in Mathematics and Mathematics Education, as well as a post-doctoral Teaching Fellowship in Mathematics or Mathematics Education.

Western Michigan University (www.wmich.edu/math/positions) is currently advertising three tenure-track positions.

Contest News

Michigan's team of all-star high school mathematics students placed twenty-fourth in Division A and fourteenth place in Division B of the American Regions Mathematics League (ARML) Competition. A total of 99 teams of 15 students each represented various regions of the United States and Canada. The competition was held on May 31, 2003, on the campuses of the University of Iowa, Pennsylvania State University, and San Jose State University.

Bob Hough, a team member from H. H. Dow High School in Midland, Michigan, placed third in the nation in the tiebreaker round among the

Contest *continued on page 14*

Teaching Award Nominations Sought

This is a preliminary announcement that the Distinguished Teaching Award Committee will be seeking nominations for the thirteenth annual (2005) MAA Award for Distinguished College or University Teaching of Mathematics. The committee will choose one of the nominees for the Michigan Section Award, and he or she will be honored at the Spring 2005 meeting of the Section. The awardee will also become the Section's candidate for the national MAA's Deborah and Franklin Tepper Haimo Award.

This year's committee recently selected **Brian McCartin** (Kettering U) to receive the 2004 award. In addition to being a superb teacher who has made a major impact on the lives of numerous Kettering students, Brian has also had a profound effect on the mathematics research of many students around the world. He is a master at making mathematics useful; his use of applications makes mathematics come alive, helping students understand the theory by basing it in contexts with which they have some familiarity. Further details about his award will appear in the Fall 2004 *Newsletter*.

Dr. McCartin joins the continuing members of the committee, **John Fink** (Kalamazoo C), chair, and **Steven Kahn**, the previous recipients, for next year's selection process.

Anyone, other than the candidate him/herself, is entitled to make a nomination. To be eligible, a candidate must be a college or university teacher teaching a mathematical science at least halftime during the academic year in a two- or four-year college or university, have at least five years teaching experience, and be a member of the MAA. Nominations are due by December 31, 2004. More information will be available in the Fall *Newsletter*. Please start thinking now about nominating your department's best teacher.

On a related note, Past Chair **John Mooningham** (SVSU) reports that **Tom Miles** (CMU) was selected to receive the Section's 2003–2004 Distinguished Service Award. Details will appear in the Fall *Newsletter*.

MUMC Planned

2004 Michigan Undergraduate Mathematics Conference will be held at CMU on Saturday, October 30. It will feature undergraduate student talks, career talks given by representatives from graduate programs and industries, a keynote speaker, and a math quiz show. **Jenny Quinn** from Occidental College will give the keynote address. Please encourage your students to participate in this meeting. The organizing committee is **Sivaram Narayan**, **Ken Smith**, **Lisa DeMeyer**, **Tom Miles** and **Yury Ionin**.

From the Origin provides a forum for lively discussion of issues of importance to the mathematical community. The Michigan Section–MAA Newsletter solicits opinion pieces for publication in this column from anyone in the Michigan mathematical community. In addition, comments on pieces published in earlier issues are welcomed.

Items for From the Origin should be submitted to the editor by the beginning of October to be considered for inclusion in the December issue and by the beginning of February for the April issue. Main opinion pieces should be at most 1800 words long, and responses at most 400. The editors reserve the right to shorten responses, if necessary, in order to fit as many as possible within the available space.

"It's Worth a Try"

John Fink
Kalamazoo College

This New Year's Eve I returned from Ecuador, where I had spent the fall semester as a Fulbright Scholar at the University of San Francisco in Quito. My assignment had been to teach a linear algebra class using MATLAB. It was one of the most pleasant teaching experiences that I have ever had, but I think the activity of more lasting importance may turn out to be a service learning project that I began with a public school in Quito.

Why Quito? About eighty-five percent of Kalamazoo College students spend at least one term and sometimes an entire year studying at universities around the world. We regularly send students to the Budapest Semester in Mathematics, and our German-speaking majors often take a math course at Erlangen, but until this year we have had no university to recommend to our Spanish-speaking majors.

"Why not apply for a Fulbright to Ecuador?" asked our Director of International Programs. I decided it was worth a try. Besides, it would give me incentive to learn Spanish. (In the Language Proficiency Certification that accompanied the application, I think I was listed in the "can take care of basic daily needs" category.)

The Fulbright applications are due more than a year before the fellowship is awarded, so there was lots of time to prepare. During the fall and the winter I sat in on the beginning Spanish classes. I wrote the quizzes, took the exams, went to the labs, and generally held myself to the same requirements expected of the students. I was crushed by the occasional C and thrilled with the A's. This humbling experience was a vivid reminder of the reality that our students live with daily. It has changed my approach to their assessment.

The Universidad San Francisco de Quito (USFQ) was founded in the late 1980's by three physicists and an economist and is modeled on that uniquely North American invention, the private four-year liberal arts college. Since its modest beginnings in a hacienda in Quito's northern suburbs with a handful of students and faculty, USFQ has grown to a university with about 3,000 students, 200 faculty, and a half-dozen handsome buildings on several acres of campus in the beautiful valley of Cumbaya to the east of Quito. USFQ works hard to diversify its student population, but with absolutely no endowment it is completely tuition-driven and only forty percent of its students receive financial aid. Its largest applicant pool is naturally from the children of Ecuador's relatively small but wealthy upper classes.

As I thought about the context of privilege that surrounds USFQ I began to wonder how I might find a natural connection to the rest of Ecuador. I decided that a service learning project might achieve this. It would also connect my students to some of the desperate needs facing their country, and would give the schoolchildren perhaps their first acquaintance with a university student. It might even awaken within them the possibility of future study for themselves.

To get an idea of what might be involved in a project like this, I decided to include a service learning component to my linear algebra class last spring. Supported by a grant from the Stryker Institute for Service Learning at Kalamazoo College, I arranged with a nearby middle school to have my students work with able but unmotivated seventh and eighth grade algebra students. This would be a natural pairing: My own students would be learning about familiar algebraic properties in the domain of vector spaces and linear operators; their middle school partners would be encountering these ideas for the first time. This project turned out to be of immense pedagogical value. And it also gave me the experience I would need for Quito.

I had been told that my students in Quito would be fluent in English, and so decided to use David Lay's book. At the Baltimore meetings I asked David if he could arrange to have the books donated to USFQ. '"It's worth a try," he said, and about a month later I received confirmation from Addison-Wesley that they would be sending 30 texts and

three instructor's editions to USFQ in early August. The lasting impact this gift will have on the students and faculty of USFQ far exceeds its considerable market value.

The mathematics department at USFQ consists of six full-time faculty and about the same number of adjuncts. Most of them are Ecuadorians. All of them have degrees from elsewhere—places like Northwestern, Wichita State, Ukraine, Illinois, and Havana. Like most of the other faculty at this new university, these mathematicians are relatively young, idealistic, and eager to contribute to the larger efforts of education in Ecuador.

Most of the students who study mathematics at USFQ do so because it is required by another discipline. My class consisted of 13 engineering students, one economist, and one physicist. Although I was using an English text, I had hoped to teach mostly in Spanish, but early in the term several students told me that it was hard for them to switch between the Spanish and English terminology. Another told me, in the gentlest possible way, that if I continued to speak so slowly we would never get through the syllabus! I decided to use Spanish at the beginning of each class meeting, then switch to English when developing new material.

The university cultivates the Socratic tradition of informal relationships between professor and student. This is not always easy to do in a culture that holds its elders in respect and with a language that has very clear rules about formal and informal personal pronouns. USFQ's way around this is to use first names for everybody. The President is "Santiago", the Dean is "Carlos," and I was "John" (usually spelled "Jhon" and pronounced "Dyong.") The telephone book, e-mail addresses, and other internal lists are sorted by first name. This works OK for the one Jhon but not so well for the twelve other Santiagos.

As my students would leave class each day, nearly every one of them would acknowledge me in some way: "Goodbye, John," or "Thank you, John," or ""Que tenga un buen fin de semana, John." Not even the shyest or most discouraged would just sneak out. It was not until I felt its absence at the end of my first few classes back in Kalamazoo that I realized how much I had come to appreciate this quiet affirmation and gentle encouragement.

A few weeks before the semester began, I described the service learning project I had introduced in Kalamazoo to Valentina, the Department Chair, and asked her if a similar thing might be possible with a public school in Quito.

"It's worth a try," she replied, in the spirit of openness that I would come to find characteristic of many in her department and at the university.

We decided to explore this possibility with Colegio Quitumbe, a K-12 school about a half-hour drive from the university. The vast majority of public schools in Ecuador fall under the jurisdiction of the highly politicized Ministry of Culture, Education, and Sport, but Quitumbe is one of a handful of public schools for which the final responsibility rests with the municipality. Because of this local authority, the school can be much more flexible in its operations. Moreover, Colegio Quitumbe enjoys strong support from the parents of its students, and the faculty and staff take great personal pride in ensuring that their students receive the best education they can provide with their limited resources.

At the end of our exploratory meeting the headmaster asked Valentina if, in addition to the USFQ students coming down to Quitumbe during the week, it might be possible for some of the teachers from Quitumbe to come up to USFQ on Saturdays for English language instruction and enrichment in science and mathematics. Her response: "It's worth a try."

A few days later, I saw an e-mail addressed to the English and Polytechnic faculty asking for volunteers. A few weeks after that, I learned that eleven English faculty and nine math and science faculty had volunteered their Saturday mornings to this effort without any incentive other than the sure knowledge that they were enlisting in a good cause. Would my colleagues back home have responded so generously? Would I have?

On the second Saturday in October, 23 teachers from Colegio Quitumbe arrived on the San Francisco campus for their first classes. After two hours of placement exams and beginning language instruction they adjourned to the mathematics department for an hour of problem solving.

These meetings continued regularly every week throughout the rest of the semester, each week led by different members of the USFQ faculty, each week attended by the same faithful 23 from Colegio Quitumbe.

"How do you get here?" I asked some of the teachers during a break between classes on a Saturday in late November. "We take the bus,"

she said (a two-hour journey). ""Or we car-pool," added another.

"How can you give up a Saturday like this?" I asked one of the USFQ teachers. He looked at me like I was crazy. "This is why I teach," he answered.

I have been witness to a number of educational initiatives over the span of my career and I know what has happened to many of them after that initial bloom of enthusiasm has faded and the spirit of innovation has departed. Since my return to Michigan, I have been concerned that the Saturday pressures that plague us all would eventually claim this noble project as well: Tia Susana's weekend visit, Hijo Carlos's futbol match, Sobrina Maria's confirmation, . . .

But a few days ago I received a very encouraging e-mail from one of the USFQ mathematicians. "We began to work more formally with the teachers of Colegio Quitumbe," he writes, "and it seems like things are going very well…. We will start also a module in Geometry with the teachers of Quitumbe in five weeks and they are excited about it."

As I reflect on this promising beginning in the Andean highlands, I am wondering if the same thing might not be possible right here in Michigan. Middle school is where the door finally shuts for many students who might otherwise go on to study mathematics and science in high school. Middle school is where sensitive and thoughtful mathematics education can really make a difference. Our middle school math teachers don't need supplementary English instruction, but they might well appreciate a regular relationship with nearby university faculty. Maybe what began as a service, learning project last spring could be extended to included occasional faculty enrichment as well.

It's worth a try.

***Contest** continued from page 7*

students at the three sites who scored highest on the individual questions in the competition.

Mathematics professors **Robert Messer** (Albion C), **Ruth Favro** (LTU), and **John Fink** (Kalamazoo C) organized the team to represent Michigan in this national competition as a follow-up to the Michigan Mathematics Prize Competition.

For further information visit www.albion.edu/math/arml.

Section Dues: Individual • Institutional

The 2003–2004 individual and institutional membership dues for the Michigan Section are now being accepted. The $15 individual dues payment (or $30 contributing member payment) and the $40 (small school) or $70 (large school) institutional dues help support the activities of the Section such as its annual meeting and *Newsletter*. This coupon may be used to submit dues payments.

Enclosed is a check for:	Regular Dues	@ $15 ☐
	Contributing Membership	@ $30 ☐
	Small Institutional Dues	@ $40 ☐
	Large Institutional Dues	@ $70 ☐

Name: _____

_____

Institution: _____

_____

Mailing Address _____

_____

E-mail Address _____

Make checks payable to the Michigan Section–MAA, and mail them to: **Margret**

Institutional Members

As of February 20, the 26 colleges and universities listed below have begun or renewed their institutional memberships in the Michigan Section for 2003–2004. Tardy institutions and others who wish to join are encouraged to send in their dues, using the form above.

Adrian College
Albion College
Calvin College
Central Michigan University
Eastern Michigan University
Grand Valley State University
Henry Ford Community College
Hillsdale College
Hope College
Kalamazoo College
Lake Superior State University
Lawrence Technological University
Michigan State University
Michigan Technological University
Muskegon Community College
Northern Michigan University
Oakland University
Schoolcraft College
Siena Heights University
Spring Arbor University
University of Detroit Mercy
University of Michigan-Ann Arbor
University of Michigan-AA Biostatistics Department
University of Michigan-Dearborn
Wayne State University
Western Michigan University

MMPC Honors Top High School Students

A total of 101 Michigan high school students, from 44 different schools, were honored for their achievement on the 47th Annual Michigan Mathematics Prize Competition at the Awards Day program held on Saturday, February 28 at Delta College. This was the second year of the three-year term of director **David Redman** (Delta College).

George Andrews (Pennsylvania State University) presented "Partitions, Compositions, and Leprechauns" and **John Conway** (Princeton University) presented "The Mysterious Arithmetic of Lexicographic Codes".

The first-place Gold Award winner and Ford Motor Company Scholar was **Colin Clarke** (Cranbrook Kingswood School). The second-place Gold Award went to **Kevin Dilks** (Saline High School). The third-place Gold Award went to **Jeffrey Madsen** (Groves High School). Silver Award winners at the first level: **John Zhou** (Detroit Country Day), **John Hawksley** (Grosse Pointe North High School), and **Deskin Miller** (Petoskey High School); at the second level: **Alex Xu** (Cranbrook Kingswood School) and **Khai Nguyen** (Saginaw Arts and Sciences Academy); and at the third level: **Samuel Bhagwat** (Livonia Math/Science/Computer Program), **Richard Turner** (Petoskey High School), and **Steven LaForest** (St. Joseph High School). In addition 40 Bronze Awards were given, and 50 students received Honorable Mention.

The top 51 students received over $33,500 in scholarships in amounts ranging from $500 to $2,600. Thanks go to the corporate and other donors to the MMPC scholarship fund. The Honorable Mention winners received copies of books by the speakers at the Awards Day program: ***Number Theory***, (Dover Publications) or ***Winning Ways For Your Mathematical Plays*** (A K Peters, Ltd.). We would like to thank the Michigan Council of Teachers of Mathematics as well as the publishers Dover Publications and A K Peters for their generous donations that covered a portion of the cost of these books.

Part I of the MMPC is a 40-question multiple choice test, which this year was administered on October 8. The top 1,059 scorers were invited to take Part II on December 3. There were 1,013 Part II participants.

The official Web site of the competition (www.delta.edu/math/mmpc) contains all information about the program including scheduling, registration materials, and previous exams with solutions. Part I of the competition is given in the Fall of each year.

MMPC Top 100 Statistics

- *Top Gold Award winner **Colin Clarke** is a senior, having been a Silver Award winner (second level) as a junior and a Bronze winner as a freshman and a sophomore. The second-place Gold Award winner, **Kevin Dilks**, is a junior. He was a Bronze winner as a sophomore. The third-place Gold Award winner, **Jeffrey Madsen**, also a junior, took a Silver Award (third level) last year as a sophomore.*
- *Of the eight Silver Award winners, five are seniors, one is a junior, and two are sophomores.*
- *Among the 40 Bronze Award winners are 20 seniors, 11 juniors, seven sophomores, one freshman, and one eighth grade student.*
- *Twenty-seven seniors, 17 juniors, five sophomores, and one freshman received Honorable Mention.*

Top MMPC Results for Each Grade

Grade	*Place*	*Score*	*Grade*	*Place*	*Score*
12	1	72.8	8	32	46.4
11	2	63.6	7	228 *	32.4
10	4	57.4	6	327 *	30.2
9	16	51.2	5	NA	NA

* Participants outside the top 104 are not officially ranked.

Top 104 Results by Grade

	Grade	**12**	**11**	**10**	**9**	**8**
Scholarships	N=51	26	14	9	1	1
Honorable Mention	N=50	27	17	5	1	0
Total	N=101	53	31	14	2	1

- *About 46% of the original contestants were female, as were about 26% of those who qualified for Part II. There were 11 young women among the Top 101 (including three scholarship winners).*
- *The total score for the competition is the sum of the Part I points (out of 40) and 1.2 times the Part II points (out of 50). The highest score was 72.8 out of 100. The cutoff score for scholarships was 42.6. It took a 37.4 to make it into the Top 101.*
- *The cut-off score to qualify for Part II this year was 23.*

MMPC Awards Day, Delta College, February 28, 2004

Gold and Silver Award Winners. First Row (l to r): Richard Turner, John Zhou, Khai Nguyen, Steven LaForest, Alex Xu. Second Row: Deskin Miller, John Hawksley, Samuel Bhagwat, Jeffrey Madsen, Kevin Dilks, Colin Clarke.

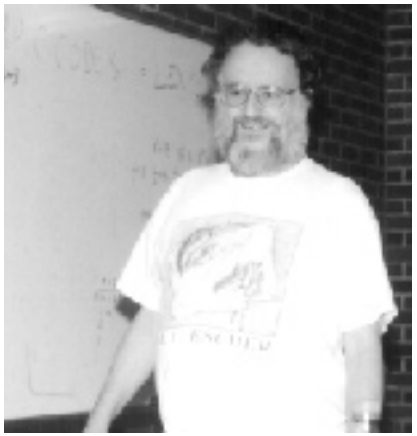
First place winner Colin Clarke is congratulated by Steve Schlicker.

Afternoon program speakers John Conway and George Andrews.

Shuyu Wang is recognized by Ruth Favro as the top female contestant.

George Andrews speaking on "Partitions, Compositions, and Leprechauns."

Grading Day volunteers at the Delta College Planetarium.



John Convway on "The Mysterious Arithmetic of Lexicographic Codes."

Ed Aboufadel, Exam Committee chair reads a quote: "I don't know the answer to this question but I know the first 19 digits of pi."

47th MMPC Part II Problems

The top 1,013 students had 100 minutes to solve these five problems.

1. Consider the equation

$$x_1x_2 + x_2x_3 + \ldots + x_{n-1}x_n + x_nx_1 = 0$$

where $x_i = 1$ or -1, for $i = 1,2, \ldots, n$.
(a) Show that if the equation has a solution, then n is even.
(b) Suppose that n is divisible by 4. Show that the equation has a solution.
(c) Show that if the equation has a solution, then n is divisible by 4.

2. (a) Find a polynomial $f(x)$ with integer coefficients and two distinct integers a and b such that $f(a) = b$ and $f(b) = a$.
(b) Let $f(x)$ be a polynomial with integer coefficients and a, b, and c be three integers. Suppose that $f(a) = b$, $f(b) = c$, and $f(c) = a$. Show that $a = b = c$.

3. (a) Consider the triangle with vertices $M(0,2n+1)$, $S(1,0)$, and $U(0,1/(2n^2))$, where n is a positive integer. If θ is the angle MSU, prove that $\tan\theta = 2n-1$.
(b) Find positive integers a and b that satisfy the following equation.

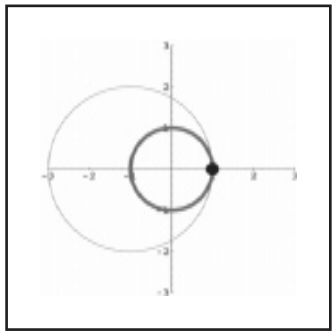
$$\arctan(1/8) = \arctan a - \arctan b$$

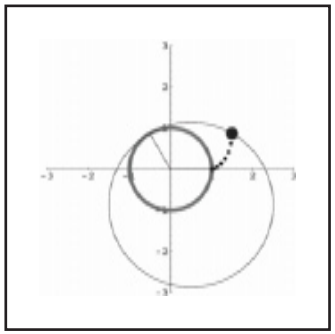
(c) Determine the exact value of the following infinite sum.

$$\arctan(1/2) + \arctan(1/8) + \arctan(1/18) + \arctan(1/32) + \ldots + \arctan(1/(2n^2)) + \ldots$$

4. (a) Prove: $(55 + 12(21)^{1/2})^{1/3} + (55 - 12(21)^{1/2})^{1/3} = 5$.
(b) Completely factor $x^8 + x^6 + x^4 + x^2 + 1$ into polynomials with integer coefficients, and explain why your factorization is complete.

5. In this problem, we simulate a hula hoop as it gyrates about your waist. We model this situation by representing the hoop with a rotating circle of radius 2 initially centered at $(-1,0)$, and representing your waist with a fixed circle of radius 1 centered at the origin. Suppose we mark the point on the hoop that initially touches the fixed circle with a black dot (see the left figure). As the circle of radius 2 rotates, this dot will trace out a curve in the plane (see the right figure). Let θ be the angle between the positive x-axis and the ray that starts at the origin and goes through the point where the fixed circle and the circle of radius 2 touch. Determine formulas for the coordinates of the position of the dot, as functions $x(\theta)$ and $y(\theta)$. The left figure shows the situation when $\theta = 0$ and the right figure shows the situation when $\theta = 2\pi/3$.





The Director Says "Thank You!"

You might know some of the people behind the scenes of the competition, but we would still like to bring them to your attention and formally thank them. We apologize in advance if we do not mention all of the significant contributions to the competition.

The examination committee works diligently behind the scenes preparing Part I and Part II: **Ed Aboufadel** (chair, GVSU), **Eddie Cheng** (OU), **John Clifford** (UM-Dearborn), and **Patrick Pan** (SVSU). They patiently work with the director and the reports of the various reviewers who in turn deserve a great deal of thanks, though they are too numerous to mention here. The examination committee also provides the director with a valuable sounding board and advisory group.

The 59 volunteers from 21 institutions around the state who attended Grading Day did an wonderful job. They are listed on the MMPC web site. Next year Grading Day will be in the Bahamas!

The MMPC supervisors at the participating schools are essential, collecting information and organizing participants, keeping timely and frequent contact with the director. If you know a supervisor at a participating school, thank him or her, and if you have any contacts in your local high schools, encourage them to consider participating if they do not already do so.

My colleagues at Delta College who tirelessly counted, stacked, sorted, collated, packed, addressed, loaded, unloaded, advised, innovated, proofread, graded, and regraded deserve a big "thank you!", though they are too numerous to mention here. The office staff led by **Linda Nadolski** deserves many thanks for their logistical support. The administration of Delta College has also contributed much practical support.

David Redman, Delta College

News from the Campuses

Adrian College *[reported by Cindy Bosio]*

Eugene VandenBoss will retire in May, 2004. [cbosio@adrian.edu]

Albion College *[reported by Robert Messer]*

Martha O'Kennon plans to take early retirement at the end of the spring semester. She has been a faculty member at Albion C for nineteen years. **Paul Anderson** will be on sabbatical leave during the 2004–05 academic year. [ram@albion.edu]

Alma College *[reported by Mel Nyman]*

We have received two grants from NSF to participate in the collaborative development of new computer science curricular materials. One project will focus on developing a system for the creation and delivery of algorithm animations, while the other centers on using the Lego Mindstorms robotic kit in the undergraduate CS curriculum. Supervised at Alma C by **Myles McNally**, the projects will provide summer research experiences for students over the next three years. For more details visit the departmental page at cronus.mcs.alma.edu. • **Tim Sipka** has started a High School MATH Challenge. This is a "problem-of-the-month" competition for high school mathematics students sponsored by the Mathematics & Computer Science Department. Students submit solutions either by mail or e-mail. The team of Tim and **Robert Molina** evaluate the solutions submitted and publish the best one, and an Alma C T-shirt is awarded to the top problems solver each month. The High School MATH Challenge page is at cronus.mcs.alma.edu/hsmathchallenge. • *Maple Animation*, a new book by **John Putz**, describes the methods he uses to create animations with the computer algebra system, Maple®. The book presents a variety of the techniques that John has developed in creating the animated demonstrations he uses to illustrate mathematical ideas. More details can be found at the departmental page. [nyman@alma.edu]

Grand Valley State University *[reported by Paul Fishback]*

The Department will again host an NSF Research Experiences for Undergraduates site in the summer of 2004. Eight students will be selected to work with four faculty members on research problems in wavelets, dynamical systems, spherical geometry, and the Hausdorff metric geometry. Information about the program can be found at the GVSU REU site www.gvsu.edu/math/reu.html. • **Christopher Bay**, a GVSU REU 2003 participant, presented a poster titled "When Lines Go Bad: The Geometry of the Hausdorff Metric" at the MAA undergraduate poster session at the Annual Joint Meetings of the AMS/MAA in Phoenix this January. Chris' poster was recognized as one of the session's best posters (33 posters recognized out of 108 participants). • On Saturday, October 25, 2003, more than 140 students and faculty from 19 universities across the state and surrounding region gathered at GVSU's DeVos Center for the 6th Annual Michigan Undergraduate Mathematics Conference. • **Phil Pratt** has retired. • **Steven Blair** will join the department as an Assist. Prof. in August 2004. His area of specialty is mathematics education. •

The department also anticipates more than one new mathematics position will be filled during Winter 2004 as well. • "Math In Action" was held on February 26 at the Eberhard Center on the GVSU Grand Rapids Campus. **Will Dickinson** and **Marge Friar** served as conference coordinators. The theme was "Data Analysis throughout the Mathematics Curriculum". **Deborah Ball** (UM-AA) was the keynote speaker. • "Conversation Among Colleagues: Collaborating to Improve Mathematical Education of Our Students" was a daylong conference held on Saturday, March 20 at GVSU's DeVos Center. The keynote address, "Knowing and Learning Mathematics for Teaching", was given by **Hyman Bass** of the University of Michigan. [fishbacp@gvsu.edu]

Hope College [reported by Todd Swanson]

Janet Andersen received the Hope C Provost's Award for Excellence in Teaching this year. • **Darin Stephenson** is on sabbatical this semester. • **Tim Pennings** has been promoted to Prof. • Students **Daniela Banu**, **Stefan Coltisor**, and **Heidi Libner** finished in first place in last Fall's Michigan Autumn Take-Home Challenge. • The article, "Do Dogs Know Calculus", written by Tim Pennings, was featured in *The College Mathematics Journal* last May. Since that time, articles about Tim's dog Elvis have appeared in many publications, from newspapers like the *Chicago Tribune*, to radio interviews by the BBC, to children's magazines like *Current Science* and *MUSE*, to dog journals like *AKC Family Dog*. [swansont@hope.edu]

Kettering University [reported by Kevin G. TeBeest]

Philip Richard, Jr., Assoc. Prof. of Mathematics, and **Kevin G. TeBeest**, Assoc. Prof. of Applied Mathematics, each received the 2003 Outstanding Teacher of the Year Award. The Kettering U Alumni Association bestows the award upon faculty based on their intellectual integrity, their inspirational qualities, and their effectiveness in teaching. [ktebeest@kettering.edu]

Lake Superior State University [reported by Brian Snyder]

LSSU will be hosting the 2004 Upper Peninsula Regional Meeting of the Michigan Section of the MAA. The meeting will be Friday and Saturday, October 8–9 on the LSSU campus. We are looking for speakers from all of Michigan to participate, with a special invitation extended to people currently in the UP and northern lower Michigan. The latest information, including contact information and list of speakers, will be available at math.lssu.edu. [bsnyder@lssu.edu]

Lawrence Technological University [reported by Mike Merscher]

Ruth Favro has been promoted to Prof. • **Chan-Jin Chung** has been promoted to Assoc. Prof. • **Mike Merscher** was named LTU's Faculty Person of the Year for 2003. • We were pleased to welcome **Jerry Grossman** as a guest speaker recently, on the topic "Mathematical Games for Fun and Profit." • The 35th Annual LTU High School Math Competition will be held on April 25. Robofest 2004 will occur on April 24. Both events are features of the Annual LTU Open House Weekend. [merscher@ltu.edu]

Spring Arbor University [reported by Garnet S. Hauger]

Keith Devlin will be a keynote speaker at our all-campus FOCUS series on March 31. The theme of this year's FOCUS event is "Life by the Numbers". Each department on campus is asked to prepare and conduct a one-hour workshop for students, faculty, and guests who wish to attend. Some of the topics are credit cards, the stock market, trends in education, how to read research, the end of modernity, the census, information explosion, problem solving, what it means to be a Tier 1 university, the golden mean, numbers that mattered in history, grading and objectivity. • Last summer the mathematics department in cooperation with the Jackson County Intermediate School District and the Jackson Public Schools (JPS) conducted a program for elementary teachers in JPS. The specific goal of the program was to increase mathematical knowledge of these teachers. The curriculum for the mathematics class these teachers took centered on the Michigan Curriculum Framework mathematics strands and benchmarks. NCTM standards materials were used for this class. The end of experience evaluation showed that teachers' knowledge of mathematics had significantly increased (in a statistical sense). This experience was funded by Title II (Improving Teacher Quality Professional Development Grant Program). This coming summer a similar program for the same teachers is being conducted for science. [ghauger@arbor.edu]

University of Detroit Mercy [reported by John O'Neill]

Instructor **Lazaros Kikas** has successfully defended his doctoral thesis in Applied Mathematics at Oakland U. • Once again we will co-sponsor a number of programs and camps this Spring and Summer which expose students (grades 4-12) to the sciences and to engineering. For more information contact **Dan Maggio** (maggiodd@udmercy.edu). [oneilljd@udmercy.edu]

University of Michigan-Ann Arbor [reported by Hugh Montgomery]

New faculty: **Jinho Baik** (analysis, random permutations), **Stephen DeBacker** (*p*-adic representation theory), **David Kausch** (actuarial science), **David Radnell** (vertex operator algebras), **Nathan Reading** (combinatorics), **Elizabeth Stanhope** (differential geometry), **Howard Thompson** (algebraic geometry), **Juliana Tymoczko** (group theory), **Bernardo Uribe** (algebraic topology), **Monica Vandieren** (logic), **Sijue Wu** (pde, fluid dynamics, harmonic analysis), **Hui Xue** (number theory), **Yongwei Yao** (algebra), and **Virginia Young** (actuarial science). • Promotions: **Trachette Jackson** (to Assoc. Prof.), **Smadar Karni** (to Prof.), **Bruce Kleiner** (to Prof.), **Peter Miller** (to Assoc. Prof.), and **Patrick Nelson** (to Assist. Prof.). • External awards: **Anthony Bloch** has been elected a fellow of IEEE. **Harm Derksen** has won an early CAREER award in science and engineering. **Charlie Doering** has been elected Vice-Chair of the American Physical Society's Group on Statistical and Nonlinear Physics. **Trachette Jackson** won an Alfred P. Sloan research fellowship, and a Woodrow Wilson career enhancement fellowship. **Bob Megginson** was selected by the National Association of Mathematicians to deliver the 2003 Bharucha-Reid Lecture. **Kannan Soundararajan** has been awarded the

2003 Salem Prize. • Upcoming event: **Karen Uhlenbeck**, distinguished applied mathematician and UM-AA alumna, will be awarded an honorary doctorate by UM-AA at the May commencement. [hlm@umich.edu]

University of Michigan-Flint *[reported by Steven C. Althoen]*

Richard Alfaro is serving as Senior Faculty Advisor to the Chancellor this academic year. • **Steve Althoen** is spending part of his Winter sabbatical observing two mathematics education classes at UM-Dearborn. [salthoen@umflint.edu]

Wayne State University *[reported by Daniel Frohardt]*

Rafail Khasminskii has been named Distinguished Professor by the WSU Board of Governors. • **Boris Mordukhovich** will receive the 2004 Distinguished Graduate Faculty Award from WSU. • The Owens Memorial Lecture this year will be on Monday, April 26. The speaker will be **Sylvain Capell** of the Courant Institute. [danf@math.wayne.edu]

Western Michigan University *[reported by Barbara McKinney]*

Robert Laing retired from the department effective July 1, 2003. • Recent department speakers have included: **Sema Salur** (Northwestern U), **Patricia Hersh** (UM-AA), **Jonathan Hodge** and **Micah Terhaar** (GVSU), **Michael Kinyon** (IUSB), **Monica Torres** (Northwestern U), and **Larry Fialkow** (SUNY New Paltz). • The department is currently advertising three tenure-track positions. More information can be found at www.wmich.edu/math/positions. [barbara.mckinney@wmich.edu]

Student Chapter News

Grand Valley State University

The GVSU Math & Stats Club has a full schedule of events this semester. We are planning a poker tournament, an evening of ice skating, and a trip to the University of Michigan. Before GVSU students schedule for classes, we will also be holding informational sessions for freshman and sophomore mathematics majors. We have a brand new Web site at www2.gvsu.edu/~mthclub which lists all of our events. Feel free to check us out!

Lawrence Technological University

A new student chapter of MAA has been organized at LTU.

Western Michigan University

Michigan Epsilon, WMU's chapter of Pi Mu Epsilon, has several speakers scheduled this semester. **Carl Cowen** (Purdue U) will speak on February 6, **Tim Pennings** (Hope C) on February 13, and **Curt Linder** (Auburn U) on April 2. The full schedule can be found on wmich.edu/math/pimuepsilon.

Doctoral Studies at
Central Michigan University

PhD with Concentration in
the Teaching of College Mathematics

This PhD is a content-based degree designed to prepare individuals for a career in college teaching. The program consists of broadly distributed coursework, professional pedagogical component, teaching internship, and dissertation. Areas of research strength include approximation theory, combinatorics, fluid dynamics, functional analysis, operator theory, number theory, algebraic geometry, algebra, differential geometry, statistics, and mathematics education. For information contact: Mohan Shrikhande, Graduate Director, Department of Mathematics, Central Michigan University, Mt. Pleasant, MI 48859; phone 989-774-3596, fax 989-774-2414, mathgrd@cmich.edu, www.cst.cmich.edu/units/mth.

CMU, an AA/EO institution, is strongly and actively committed to increasing diversity within its community (www.cmich.edu/aaeo.html).

University of Michigan
Biostatistics Department

MS, MPH, PhD Degree Programs

Our department offers training in the development and application of statistical and mathematical methods to the design and analysis of biomedical research. We offer course work leading to the degrees of Master of Science, Master of Public Health, and Doctor of Philosophy. We have a large number of funding opportunities for our students including graduate student instructorships, graduate student research assistantships, training grants, scholarships, and fellowships. The faculty conduct cutting-edge research in bioinformatics, imaging, longitudinal data, missing data, survival analysis, statistical genetics, and many other areas. Our graduates have great job opportunities in fields such as government, industry (e.g. biotech, pharmaceuticals), medical research institutions, and universities.

For further information and application materials, please contact sph.bio.inquiries@umich.edu. Detailed information is also available on our Web site at www.umich.edu/biostat.

MICHIGAN STATE UNIVERSITY
Department of Mathematics

The Department offers coursework leading to the degrees of

Master of Science
Master of Science in Applied Mathematics
Master of Science in Industrial Mathematics
Master of Arts for Teachers
Doctor of Philosophy

Doctoral candidates may pursue study and research in the areas of

Algebra
Analysis
Applied mathematics
Combinatorics and Graph Theory
Dynamical Systems
Geometry
Mathematics Education
Topology

Assistantships are available. The Department usually awards at least 110 graduate teaching assistantships to new and returning graduate students on the basis of merit. Duties include classroom instruction, paper grading, and learning center duties. An assistantship provides a stipend of approximately $1300 per month and includes a nine-credit tuition waiver, a waiver of fees, and health insurance for each fall and spring semester.

Detailed information is available on our Web pages:

www.math.msu.edu

For further information and application materials, contact

Director of Graduate Studies
Department of Mathematics
Michigan State University
East Lansing, MI 48824-1047
Telephone: 517-353-4650
E-mail: grad@mth.msu.edu

Contributing Members Listed

The Michigan Section dues structure includes a sustaining individual member category for those who make a $15 contribution beyond the basic dues rate of $15. For 2003–2004, as of February 20, the 58 members of the Section listed below are sustaining members. If you have not already sent in your dues, please do so, using the form on page 15, and please be generous!

Aboufadel, Edward
Alavi, Yousef
Althoen, Steve
Angelos, James
Besancon, James
Bosier, Edward
Bragg, Mary
Buckley, Joseph
Carroll, Tim
Clifford, John
Daniel, Arthur
Dickinson, William
Eenigenburg, Paul
Ehmann, Michael
Favro, Ruth
Fleming, Richard
Frohardt, Daniel
Gardiner, Chris
Gilpin, Michael
Gioia, Tony
Graham, Sidney
Grossman, Jerry
Ham, Jim
Hammel, Arnold
Hannan, James
Hartley, Eric
Hoft, Margret
Kaplan, Wilfred
Kasten, Virginia
Kiltinen, John
Lewis, William
Lick, Don
Marchand, Margaret
McLaughlin, Renate
Miles, Tom
Moore, W. Keith
Myers, Robert
Nyman, Mel
Petro, John
Rahn, Joan
Redman, Bruce
Remski, Joan
Richert, Norman
Sagan, Bruce
Sherburne, Frank
Skaff, Michael
Slaby, Harold
Stich, Philip
Stob, Michael
Tanis, Elliot
Tanoff, Michael
Vanzwalenberg, George
Venema, Gerard
Verdonk, Sylvia
Warren, Bette
Wasserman, Robert
Wyneken, Matt
Xeras, Robert

COMMITTEES AND APPOINTMENTS

Michigan Section

Mathematical Association of America

Contact Information

Executive Committee

Chair	Steve Schlicker (04)	Grand Valley SU	schlicks@gvsu.edu	616-331-2305
Vice Chair	Scott Barnett (04)	Henry Ford CC	sebarnett@hfcc.edu	313-845-6496
Vice Chair	Gerard Venema (04)	Calvin C	venema@calvin.edu	616-526-6402
Sec/Treas	Margret Höft (04)	UM-Dearborn	mhoft@umich.edu	313-593-5007
Past Chair	John Mooningham (04)	Saginaw Val. SU	jwm@svsu.edu	989-964-4183
Governor	Jerrold W. Grossman (04)	Oakland U	grossman@oakland.edu	248-370-3443

High School Visiting Lecture Program (HSVLP)

Co-Dir.	Brian Snyder (05)	LSSU	bsnyder@lssu.edu	906-635-2658
Co-Dir.	Evan Schemm (05)	LSSU	eschemm@lssu.edu	906-635-2633

Michigan Mathematics Prize Competition (MMPC)

Director	David Redman (05)	Delta C	bdredman@alpha.delta.edu	989-686-9190
Exam Committee:				
Chair	Ed Aboufadel (04)	Grand Valley SU	aboufade@gvsu.edu	616-331-2445
Member	Eddie Cheng (05)	Oakland U	echeng@oakland.edu	248-370-4024
Member	John Clifford (06)	UM-Dearborn	jcliff@umd.umich.edu	313-593-4259
Member	Patrick Pan (07)	Saginaw Val. SU	pan@svsu.edu	989-964-7357

Program Committee: 2004 Annual Meeting

Co-Chair	Scott Barnett (04)	Henry Ford CC	sebarnett@hfcc.edu	313-845-6496
Co-Chair	Gerard Venema (04)	Calvin C	venema@calvin.edu	616-526-6402
Member	Kevin Andrews (04)	Oakland U	andrews@oakland.edu	248-370-4025
Member	Deborah Ball (04)	UM-Ann Arbor	dball@umich.edu	734-647-3713
Member	Earl Fife (04)	Calvin C	fife@calvin.edu	616-526-6403

Local Arrangements Committee: 2004 Annual Meeting

Chair	Jack Nachman (04)	Oakland U	nachman@oakland.edu	248-370-3436
Member	Kevin Andrews (04)	Oakland U	andrews@oakland.edu	248-370-4025
Member	Eddie Cheng (04)	Oakland U	echeng@oakland.edu	248-370-4024
Member	Jerry Grossman (04)	Oakland U	grossman@oakland.edu	248-370-3443
Member	Serge Kruk (04)	Oakland U	kruk@oakland.edu	248-370-3428

Michigan Section *Newsletter*

Editor	Norman Richert	Math. Reviews	nrichert@ams.org	734-996-5254
Assoc. Ed.	Jerrold W. Grossman	Oakland U	grossman@oakland.edu	248-370-3443
Ad Manager	Matthew Boelkins	Grand Valley SU	boelkinm@gvsu.edu	616-331-3384

Distinguished Service Award Committee

Chair	John Mooningham (05)	Saginaw Val. SU	jwm@svsu.edu	989-964-4183
Member	Ruth G. Favro (04)	Lawrence Tech U	favro@ltu.edu	248-204-3531
Member	Steve Schlicker (06)	Grand Valley SU	schlicks@gvsu.edu	616-331-2305

Distinguished Teaching Award Committee

Chair	Charlene Beckmann (05)	Grand Valley SU	beckmannc21@aol.com	616-331-2066
Member	John B. Fink (04)	Kalamazoo C	fink@kzoo.edu	616-337-7062
Member	Steve Kahn (06)	WSU	skahn@math.wayne.edu	313-577-3471

Nominating Committee

Chair	John Mooningham (04)	Saginaw Val. SU	jwm@svsu.edu	989-964-4183
Member	Scott Barnett (04)	Henry Ford CC	sebarnett@hfcc.edu	313-845-6496
Member	Jody Sorensen (04)	Grand Valley SU	sorensej@gvsu.edu	616-331-2302

Audit Committee

Member	Chris Gardiner	Eastern Mich U	cgardiner@emich.edu	734-487-3386
Member	Gerald D. Ludden	Michigan State U	ludden@math.msu.edu	517-353-6335

Organizing Committee: Upper Peninsula Regional Meeting

Co-Chair	Brian Snyder	LSSU	bsnyder@gw.lssu.edu	906-635-2158
Co-Chair	Sherilyn Duesing	LSSU	sduesing@gw.lssu.edu	906-635-2150
Co-Chair	George Voutsadakis	LSSU	mterwilliger@gw.lssu.edu	906-635-2162

Other Appointments and Contacts

Webmaster	Earl D. Fife	Calvin C	fife@calvin.edu	616-526-6403
Pub. Inf. Off.	Bob Xeras	Siena Heights U	rxeras@sienahts.edu	517-265-5832
St. Act. Coord.	Randall Pruim	Calvin C	rpruim@calvin.edu	616-526-7113
AMC 8 Co-Dir.	Kristina D. Hansen	U of Mich-Flint	khansen@umich.edu	810-762-3304
AMC 8 Co-Dir.	Ricardo Alfaro	U of Mich-Flint	ralfaro@umich.edu	810-762-3247
WAM	Toni Carroll	Siena Heights U	toni@alpha.sienahts.edu	517-264-7658
MiSMA	Matthew F. Wyneken	UM-Flint	mwyneken@umich.edu	810-762-3313
Liaison Coord.	Robert Molina	Alma C	molina@alma.edu	517-463-7197
Archivist	John W. Petro	Western Mich U	john.petro@wmich.edu	616-387-4591
Mich NExT	John Clifford	UM-Dearborn	jcliff@umd.umich.edu	313-593-4259

Michigan Section-MAA Web Site
www.michmaa.org

National MAA Headquarters, Washington, DC
www.maa.org, 800-741-9415

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INDIVIDUAL

1. APPLICANT INFORMATION

TOTAL REMITTANCE $

4. PAYMENT INFORMATION