DATED MATERIAL
PLEASE EXPEDITE

Norman Richert, Editor
Michigan Section–MAA *Newsletter*
Mathematical Reviews
University of Michigan
P.O. Box 8604
Ann Arbor, MI 48107-8604

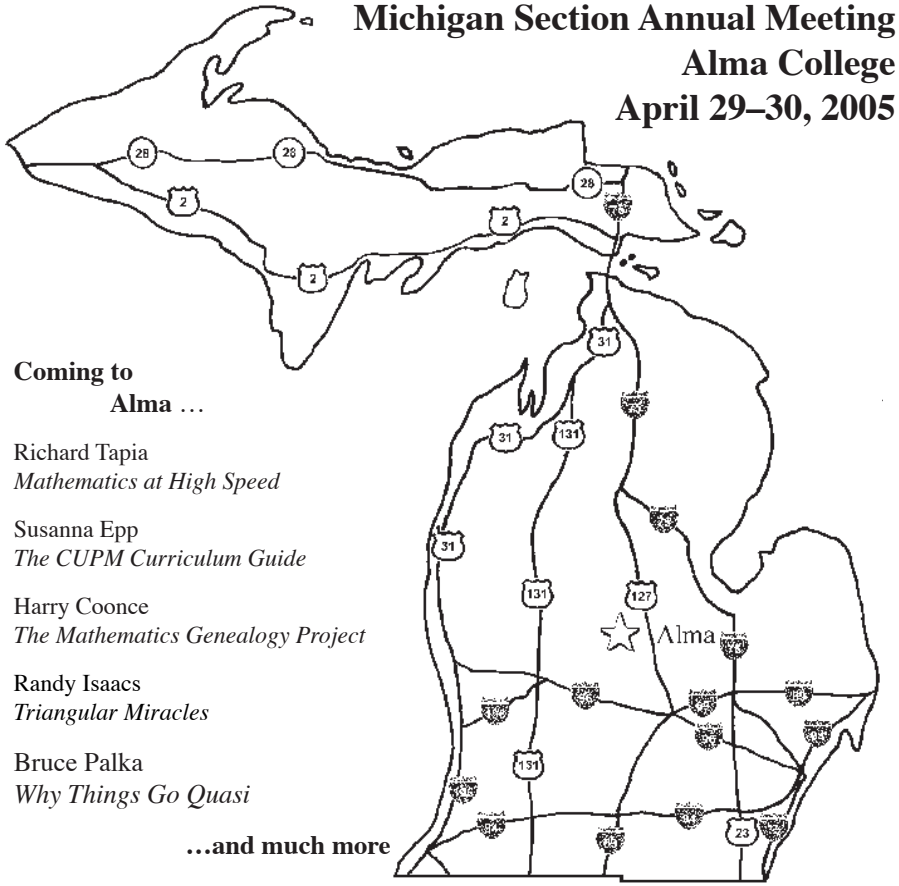
www.michmaa.org

Michigan Section – MAA

NEWSLETTER

Volume 31, Number 2 **April 2005**

Michigan Section Annual Meeting
Alma College
April 29–30, 2005



Coming to Alma …

Richard Tapia
Mathematics at High Speed

Susanna Epp
The CUPM Curriculum Guide

Harry Coonce
The Mathematics Genealogy Project

Randy Isaacs
Triangular Miracles

Bruce Palka
Why Things Go Quasi

…and much more

IN THIS ISSUE:

Mathematical Association of America
Michigan Section Newsletter
Volume 31, Number 2

Contents

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: John Stoughton, Mathematics Department, Hope College, Holland, MI 49423; 616-395-7526; stoughton@hope.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

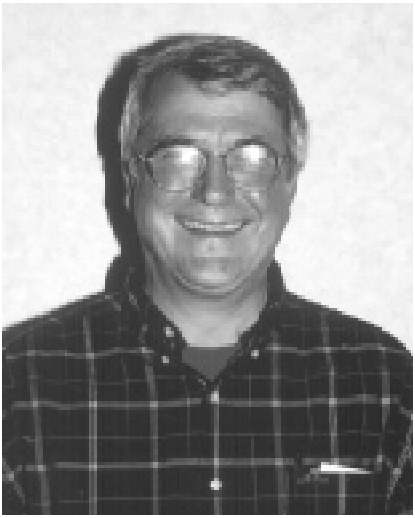
Calendar of Events

April 7–9, 2005	NCTM Annual Meeting, Anaheim
April 29–30, 2005	Michigan Section Meeting, Alma C, Alma
August 4–6, 2005	MAA MathFest, Albuquerque
October 22, 2005	MUMC, UM-Flint
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
May 5–6, 2006	Michigan Section Meeting, Calvin C, Gr. Rapids
August 10–12, 2006	MAA MathFest, Knoxville
November 2–5, 2006	AMATYC Annual Meeting, Cincinnati
January 4–7, 2007	MAA/AMS Annual Meeting, New Orleans
April or May, 2007	Michigan Section Meeting, UM-Dearborn
August 3–5, 2007	MAA MathFest, San Jose
November 15–18, 2007	AMATYC Annual Meeting, New Orleans
January 6–9, 2008	MAA/AMS Annual Meeting, San Diego
January 7–10, 2009	MAA/AMS Annual Meeting, Washington, D.C.
January 6–9, 2010	MAA/AMS Annual Meeting, San Francisco

Organizational Web sites

Michigan Section–MAA	www.michmaa.org
MAA	www.maa.org
NCTM	www.nctm.org
MCTM	www.mictm.org
AMATYC	www.amatyc.org
MichMATYC	www.michmatyc.org
MMPC	www.delta.edu/math/mmpc
MiNExT	www.calvin.edu/~rpruim/next/mich

Annual Meeting, April 29–30



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, April 29 and 30, at Alma College, in Alma, 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 **Bruce Palka** of the University of Texas at Austin. His title is "Why Things Go Quasi in Higher Dimension". The talk will discuss Liouville's 1850 theorem which shows the relative paucity of conformal mappings in Euclidean spaces of dimension three and higher in comparison to the situation in the plane, where Riemann's mapping theorem ensures a wealth of these maps. Later in the day, this time wearing his hat as its Editor, Prof. Palka will hold an informal conversation about publishing in The Monthly. This gathering is sponsored by the NexT Fellows and—as with most of their events—all are welcome to attend.

The Friday luncheon talk will feature a panel discussion that will consider some of the implications that the "No Child Left Behind (NCLB)" Act holds for mathematics education. What are some of the changes that NCLB will necessitate? What are some of its possible positive outcomes, and what other changes will be necessary if they are to be achieved? These are some of the questions to be taken up by the panel, which includes **Charles Allan** from MSU, who is Chair of MCTM, **Rebecca Walker** from GVSU, and **Leo Paveglio**, a high school teacher from Lapeer.

The Friday afternoon speaker is **Richard Tapia** of Rice University. Among his many honors, some of the most recent include the Society for Industrial and Applied Mathematics Prize for Distinguished Service to the Profession (2004), the American Mathematical Society Distinguished Public Service Award (2003), and the Society for the Advancement of Chicanos and Native Americans in Science Distinguished Scientist Award (2000). The title of Professor Tapia's talk will be, "Math at Top Speed". In this talk, he will explore—and break—some of the cherished myths in

drag-racing folklore.

The Awards Banquet on Friday evening will feature **Harry Coonce**, University of North Dakota, who founded the Mathematics Genealogy Project. In his talk, "Tales from the Mathematics Genealogy Project", Prof. Coonce will present a look at the history of the project, including how it was started and how it has developed over the last decade. He will also relate some of the amusing—and not so amusing—incidents along the way. Those who attend the meetings may order a T-shirt on which their complete mathematical genealogy is printed (mine includes Plucker, Gauss, and Pfaff.)

On Saturday morning, **Susanna Epp** of DePaul University will speak on the new CUPM guidelines, which have been published by the MAA under the title Undergraduate Programs and Courses in the Mathematical Sciences: A CUPM Curriculum Guide 2004. They were developed after four years of intensive work and interaction with the mathematical community. They are accompanied by an online publication, Illustrative Resources for CUPM Guide 2004, which was developed to serve as an existence proof that the recommendations of the Guide are indeed feasible. This talk will discuss the contents of both publications and invite comments and responses from the audience.

The meeting concludes with a Saturday luncheon talk by **Marty Isaacs** of the University of Wisconson. Prof. Isaacs is one of the MAA Polya Lecturers this year. He has recently published a new geometry text for college students. Emphasizing "really pretty" theorems and their proofs rather than the typical formalism, Isaacs focuses on the two classic themes of geometry, fact and proof. The title of his talk will be "Triangular Miracles."

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 15 and that hotel reservations must be made by April 8 in order to receive the conference rate. The deadline for submission of abstracts for student talks is April 15.

The program committee for this year consists of co-chairs **John Fink** (Kalamazoo C) and **Mark Naber** (Monroe CC), along with **David Murphy** (Kalamazoo C), **Christine Browning** (WMU), and **Tim Sipka** (Alma C).

Chairperson's Report

The main event in the Section each year is the Annual Meeting in the Spring. This year the meeting will take place at Alma College on April 29 and 30. The program committee, co-chaired by **John Fink** and **Mark Naber**, has put together what looks like an outstanding program for the meeting; you can read all about it elsewhere in this *Newsletter*. In order to encourage attendance at the meeting and to help establish a pattern of attendance, the Section is making a special effort this year to encourage new members to attend. In the next few weeks the national MAA office will be sending each new member of the Section a special invitation to attend the meeting, along with a coupon that will waive the registration fee for those who are new to the Michigan Section this year. The 2006 meeting will be held at Calvin College in Grand Rapids and the 2007 meeting will be held at the University of Michigan-Dearborn. Ideally the location should alternate between the east and west sides of the state, but a central location (like Alma) is also convenient.

One of my official duties and privileges as chair of the Section is to participate in the Upper Peninsula Regional Meeting of the Michigan Section. This year the meeting was held at Lake Superior State University in Sault Sainte Marie, October 8 and 9, and was organized by **Brian Snyder**, **Sherilyn Duesing**, and **George Voutsadakis**. Driving to the meeting this Fall reminded me of how beautiful our state is but also reminded me of how wrong those of us on the Lower Peninsula are when we think of Alma as being "centrally located" in the state. I appreciate the special efforts of so many of our UP colleagues to attend the Annual Meeting and applaud their efforts to organize a regional meeting of their own.

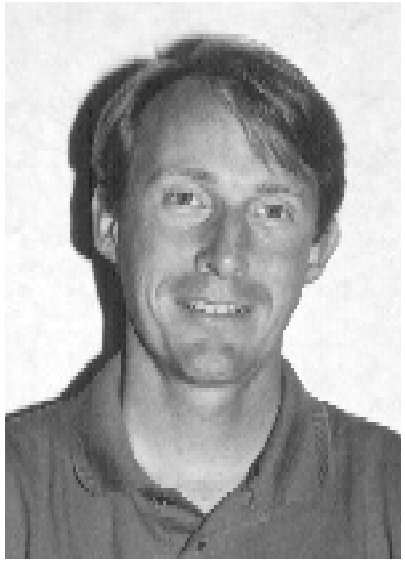
The third meeting sponsored by the Section each year is the Michigan Undergraduate Mathematics Conference. This meeting has a relatively short history, but it is evolving into one the highlights of the year for the Section. This past Fall the meeting was held at Central Michigan University and was organized by **Sivaram Narayan**, **Ken Smith, Lisa DeMeyer**, and **Yury Ionin**. The next MUMC will be held at the University of Michigan-Flint. You can find more details elsewhere in this *Newsletter*. **Randy Pruim**, who

serves as Student Activities Coordinator for the Section, is responsible for finding a location for the meeting each year.

I hope to see you in Alma this April.

Gerard Venema, Chair

Two-Year College Vice Chair's Report



Assessment in mathematics courses has been occupying many faculty minds of late. Administrators of public institutions are under pressure from taxpayers and politicians to be "more accountable" and from accrediting institutions to demonstrate some form of quality control. Formally speaking, assessment is a process by which an educator obtains information about student learning outcomes and then uses this information to improve efforts. Mathematically speaking, we would like to create a feedback loop so we can make sure that our students are learning what we hope they are learning and that they are learning as much as possible. Assessment is indeed a valid concern at two-year schools. Student demographics change with the economy and the times. Technology is advancing and changing the way we deliver course material. A gauge to tell mathematics instructors what is working with the current group of students would be very nice.

Having been in many faculty meetings where this is discussed, I know that assessment is usually met with groans of annoyance. This reaction is not because the information is not valued; it is because it is so hard to collect and quantify, especially if it must be quantified in the form of a report given to an administrator who may or may not have a mathematics background. Additionally, many mathematics instructors are apprehensive about giving up course time for assessment. After all, mathematics is fun—why would you want to give up fun time for assessment time? Another impediment to assessment is the time that it takes up outside of the classroom. Most instructors at two-year schools have significant teaching loads as well as committee responsibilities. Time spent on assessment cuts into course preparation time and research time. In the end, this can cause the level of creativity for course preparation to fall.

Many mathematics instructors claim to have a "gut feeling" about the level of learning success in a particular class. I used to be one of those instructors. Yes, I can tell when a class understands a particular topic and when they do well on a test; however, I have noticed something over the years that I have been teaching. Something happens during the Christmas and summer breaks; students seem to forget much of what I thought they had learned. So, not only is a gut feeling hard to quantify; it may be wrong. This phenomena begs another question about assessment: should we assess while students are in the course or some time after they have left the course?

Some institutions are allowing individual instructors to make their own assessment devices, while other schools attempt to assess at the department level. Both methods can be fraught with difficulties. If each instructor uses his or her own device it is hard to know whether everyone is measuring something useful. If it is done at the department level we run the risk of instructors teaching to the assessment device (this can be especially true if there are significant numbers of part-time instructors). This can stifle course creativity and create unneeded tensions within a department.

In closing, I would like to solicit your ideas. What seems to work for you? In your experience, what does not work and why? What are you trying to measure when you assess? Over the course of the next year, please send me your ideas and experiences and I will report the results in the spring 2006 *Newsletter*. Responses will be kept anonymous.

Mark Naber, Two-Year College Vice Chair

Governor's Report

In January the Strategic Planning Commission gave their report. The report focused on core interests: Education, Research, Professional Development, Public Policy, Public Appreciation. Strategic planning will be done on a continuing basis in the sense that each year of a 5-year cycle the Executive Committee will re-evaluate several of the major issues the report identified. Areas targeted for the next 12–18 months are professional development, revenue, and the AMC. Other possible areas include membership, books, and Web resources.

SUMMA has received funding for five additional REU sites; each will host about four minority students.

There are now two MAA Governors who were Project NExTers.

Book sales are strong—I am always impressed by the new offerings. Get yours at a discount at our Section Annual Meeting. Math Bio 2010 is out, as is a 2-CD set honoring **Martin Gardner**.

Local news—**Allen Schwenk** from WMU takes over as Editor of *Mathematics Magazine* next year.

The theme for Mathematics Awareness Month (April) is Mathematics and the Cosmos. See www.mathaware.org for poster and resources (or go to www.maa.org).

The 2005 Mathematics Trip explores Mayan mathematics in Mexico, May 23–June 2.

Happy Birthday—**G. Baley Price**, President of the MAA in 1957 and 1958, will celebrate his 100th birthday on March 14, 2005.

I hope to see you at Alma on April 29–30, and in Albuquerque on August 4–6 for MathFest!

Ruth Favro, Governor

Secretary/Treasurer's Report

I would like to thank everyone who has sent in a dues payment for 2005. At this time there are 141 dues-paying members. Among these, there are 51 sustaining members, who have paid dues of $30 or more. In addition, the Michigan Section also received a private donation of $500 this year. The list of sustaining members can be found on page 33.

We now have 25 institutional members. This list can be found on page 15. If your school is not listed, you might want to remind your department chair. Last year at this time there were 154 dues-paying individual members, including 58 sustaining members, and 26 institutional members. If you have not yet sent in a dues payment and wish to do so, the membership form can be found on page 15. Remember, dues-paying members pay no registration fee for the Annual Meeting.

	3/'00	3/'01	3/'02	3/'03	3/'04	3/'05
dues-paying members	97	115	102	103	96	90
sustaining members	53	61	60	60	58	51
institutional members	26	25	27	16	26	25

The Michigan Section's current bank balance is $7,710, which includes $863 remaining from the grant committed to the Section's Project NExT. This year's balance is consistent with the balance from previous years at this time, with $8,300 in 2004 and $7,694 in 2003. We have a good balance of income and expenses. The Section is in good shape financially.

Nancy Colwell, Secretary/Treasurer

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 2005 unless otherwise stated, and further information is available from the department.*

Schoolcraft College (www.schoolcraft.edu/jobs/default.asp) expects a posting soon to fill a position for a full-time Mathematics Instructor.

Siena Heights University (thusband@sienahts.edu) is hiring an Assistant Professor of Mathematics.

Spring Arbor College (ghauger@arbor.edu) has a full-time tenure track position in Mathematics. A Ph.D. in Mathematics is preferred, but candidates with a strong masters degree in Mathematics will be considered.

Oakland University (http://www2.oakland.edu/provost/web/jobdetail.cfm?ID=190) is looking for an Assistant Professor in Algebra.

Wayne State University (www.math.wayne.edu/employment/posting031039.htm) is in the process of hiring a tenure-track person at the Assistant or Associate level.

Michigan NExT

The Sixth annual Michigan Project NExT Symposium is slated for the afternoon of Thursday, April 28, at Alma College, the day prior to the Michigan Section Annual Meeting. The program for the Michigan NExT sessions varies from year to year and is designed to address issues of particular importance to new faculty, such as: developing successful teaching and assessment strategies; supervising undergraduate research; planning new courses and selecting textbooks; using appropriate technology in the classroom; balancing teaching, research and service responsibilities; starting and maintaining a teaching portfolio; achieving tenure; and more.

The symposium will consist of four 30-minute talks, followed by dinner for all participants. Past and present national or Michigan Project NExT fellows are cordially invited to attend. Those planning to attend for the first time are invited to formally apply for appointment as a Michigan Project NExT Fellow: Mathematics faculty in their first four years of full-time teaching with a strong commitment to teaching undergraduates are eligible. Graduate students may also apply. Details on how to apply, along with more information about past programs, can be found at www.calvin.edu/~rpruim/next/mich.

Interested parties should contact **Matt Boelkins** (boelkinm@gvsu.edu) or **Randy Pruim** (rpruim@calvin.edu).

Randall Pruim, Calvin College and UM-Ann Arbor

Teaching Award Nominations Sought

This is a preliminary announcement that the Distinguished Teaching Award Committee will be seeking nominations for the fourteenth annual (2006) 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 2006 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 **Ted Sundstrom** (GVSU) to receive the 2005 award. One of Ted's acclaimed strengths is his ability to teach students how to communicate their results, especially in writing. Ted's interest in cultivating writing among students ultimately led to his latest work, *Mathematical Reasoning, Writing, and Proof*, published by Prentice-Hall in 2003. This book is now being used at over 25 colleges and universities around the country. Further details about his award will appear in the Fall 2005 *Newsletter*.

Dr. Sundstrom joins the continuing members of the committee, **Steven Kahn** (WSU), chair, and **Brian McCartin** (KU), 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, 2005. 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 **Steve Schlicker** (GVSU) reports that **Jerry Grossman** (OU) was selected to receive the Section's 2004–2005 Distinguished Service Award. Details will appear in the Fall *Newsletter*.

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.

Quantitative Literacy: A Fresh Approach

John Mooningham
Saginaw Valley State University

The term "quantitative literacy" has different meanings even among, perhaps especially among, mathematical professionals. Is quantitative literacy the same as "mathematical literacy?" What is the relationship to "numeracy?" How different is it from "critical thinking"?

The term "mathematical literacy" is not used frequently, perhaps for several reasons. Some people may avoid it because it sounds more foreboding than quantitative literacy (QL). Also, some may use QL to broaden the ownership and spread the responsibility for it. I think of numeracy as a subset of QL which is involved with questions such as "Is this a reasonable answer?" or "What is a rough estimate?" As mathematicians, we like to think of many of our thought processes as "critical thinking". Critical thinking specialists usually have something much more general in mind. Some would not even want to include our ways of thinking under the critical thinking umbrella. Perhaps this is because they have a narrow view of what mathematics really is.

For a number of years now, government leaders and others have voiced concern that our educational institutions are not doing a good job in teaching mathematics. National tests reveal weaknesses in mathematical preparation. In addition, international tests show that the United States lags behind many other countries in mathematical achievement. When these concerns arise, technological developments with both real and potential impact on what might be considered quantitative literacy

(QL) often have moved to the center of the discussion. To some, these developments are viewed as wonderful tools, while others view the extensive use of technology as a siren song calling us to our destruction. Still others contend that technology has even obviated the study of mathematics. Although technology certainly has an impact on how we may accomplish whatever goals we set for QL, the goals themselves are not altered.

In an academic institution, who has primary responsibility for QL? Many institutions already have courses covering some aspects of QL scattered throughout the curriculum. Accomplishing goals of QL can best be done if it has the kind of emphasis that "writing across the curriculum" received over the past twenty years. However, even if such a commitment were made, we should not think that we no longer have primary responsibility. In fact, our job might grow due to needed coordination and consultation with other areas.

In this article, in order to take a fresh look at QL, I have tried to put aside what I have previously read or heard about QL. Frequently, at the first mention of QL, the initial reaction is a comment about the skills students do not possess. With this negative approach, the discussion then focuses on how we can improve the teaching of basic skills and how we can test for QL. At this point, if we are not careful, we narrowly define QL as successful performance on a test of a relatively few applications and thus delude ourselves with a kind of "pseudo-QL". No one should interpret the above to imply that we do not have some serious problems with low skill levels. We do indeed have much work to do to foster better skills development. To not do this can severely limit the progress and prosperity of our nation. However, perhaps we need a different strategy and a different approach.

QL has many aspects; I will mention only a few here. Certainly skills are included, but much more. In addition, QL encompasses a way of thinking, an exploration and appreciation of big ideas, data analysis, and patterns. Let's explore some of these in more detail.

First, we will focus on skills. To be sure, a certain level of skills must be acquired in order to accomplish much in the other areas of QL. In some sense, skills, like a language, are used to express the elements of the more important aspects of QL. Unfortunately, skill levels quickly

drop without use. An interesting question is this: "When skill levels do drop, does that mean all the other goals of QL are in jeopardy?" I am not so sure that this is the case, especially if the skills have been taught not as an end in themselves.

QL is much more than symbol manipulation, although some such skills are needed. An excessive focus in this area often brings up the inevitable question, "When will I ever use this?" This, in turn, makes attitude change, another goal of QL, more difficult to achieve.

A change in attitude brought about by an expanded understanding of the role that mathematics or mathematically related concepts play in the world is itself an important goal of quantitative literacy. This is much in the classic tradition of a liberal education and is not that different from literacy in other areas. When a student studies about poetry, we do not necessarily expect her to become a poet. When a student learns about music, we do not necessarily expect him to become a performer. Many of us had courses in appreciation of art, but few of us can successfully put oil to canvas or form to clay. Although this comment may seem misplaced in an article about QL, it is the perception of mathematics as a hard taskmaster rather than as a guide to a greater understanding of the world that severely limits what we are able to accomplish.

QL should be at least as much about big ideas as it is about the acquisition of skills. We would not all agree on what these big ideas are. Many of us would choose the concept of rates of change or changes in rates of change, while others might choose to study what patterns and symmetries tell us about the order in our world. Still others might choose to study data analysis and its pitfalls. Many others might study codes which control our world or unlock its secrets. The impact of abstraction as a way of thinking should not be overlooked. How can we fail to marvel at the infinitudes about us? A conceptual approach to transformations and continuous processes might be another area of exploration.

As one who constantly struggles with students lacking proper skills, I am not overlooking the necessity of building skills. However, a major emphasis on skills without showing some of the beauty along the way is a strategy doomed to failure. When students say that they will never use what they are being required to learn, sadly this may be the case.

Their method of learning (or perhaps our method of teaching) has not informed their way of thinking. I venture to say that probably all of us have been introduced to a new acquaintance who, upon recognition of us as mathematicians, quickly "brags" about not being good at mathematics. How much better it would be to hear them say that "although I was not very good at math [whatever that might mean], we talked about some of the most interesting concepts in my math classes."

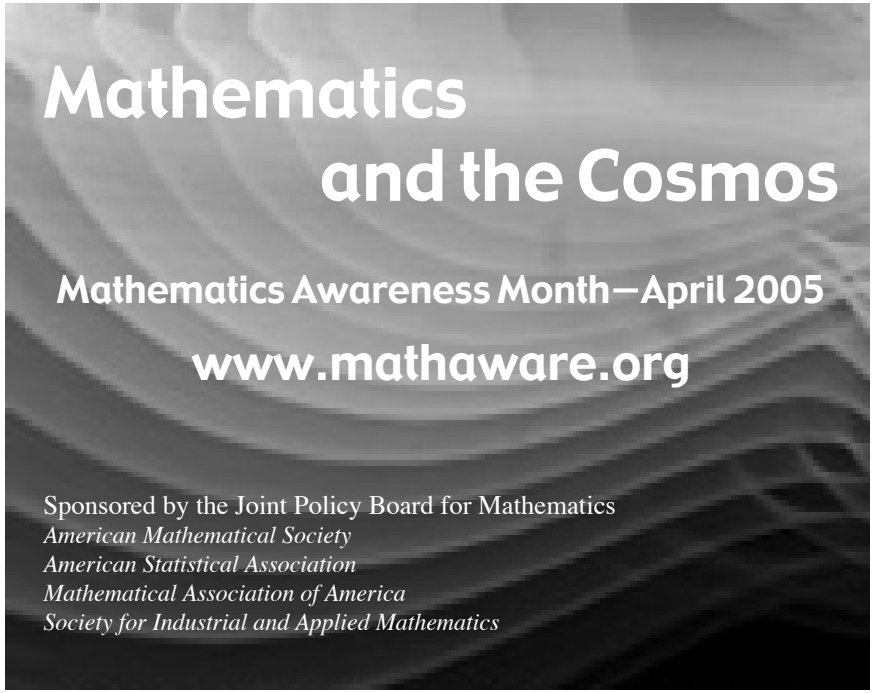
So then, what is quantitative literacy and why is it important? For most people, QL can be thought of, whimsically and a little irreverently, as the residue remaining with them when they have forgotten almost everything they were taught. If that residue includes the ability to recover skills as needed along with an appreciation of a truly exciting world with mathematics all around us, we really might not have done all that badly.

Alma in April

Contest News

The American Mathematics Competitions are sponsored by the MAA and the University of Nebraska-Lincoln. The AMC 8 Exam, given to students in grade 8 and below, is a 25-question, 40-minute multiple-choice contest with no penalty for guessing. A student's score is the number of problems correctly solved. The 2004 AMC 8 Exam was taken by 7818 students from 110 schools in Michigan on November 16, 2004. The overall Michigan average score was 9.22.

Perfect scores were achieved by three Michigan students, all eighth graders: **Willa Chen**, East Middle School in Plymouth; **Kevin Chow**, Smith Middle School in Troy; and **Jennifer Xu**, Smith Middle School in Troy. The Edyth May Sliffe Award recognizes the excellence of 50 exam managers whose students are most successful on the AMC 8. The 2004 recipients of the award in Michigan were **Michael T. Aide**, Saginaw Arts and Sciences Academy in Saginaw and **Roberta Masters**, Smith Middle School in Troy.



Institutional Members

As of February 26, the 25 colleges and universities listed below have begun or renewed their institutional memberships in the Michigan Section for 2004–2005. Tardy institutions and others who wish to join are encouraged to send in their dues, using the form above.

Adrian College
Albion College
Alma College
Calvin College
Central Michigan University
Eastern Michigan University
Grand Valley State University
Henry Ford Community College
Hillsdale College
Hope College
Kalamazoo College
Kellogg Community College
Lake Michigan College
Lawrence Technological University
Michigan State University
Michigan Technological University
Northern Michigan University
Oakland University
Saginaw Valley State University
University of Detroit Mercy
University of Michigan-Ann Arbor
University of Michigan-Dearborn
University of Michigan-Flint
Wayne State University
Western Michigan University

Section Dues: Individual • Institutional

The 2004–2005 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: **Nancy Colwell, Secretary/Treasurer, Michigan Section–MAA, Department of Mathematical Sci-**

MMPC Honors Top High School Students

A total of 103 Michigan high school students, from 46 different schools, were honored for their achievement in the 48th Annual Michigan Mathematics Prize Competition at the Awards Day program held on Saturday, February 26 at Delta College. This was the final year of the three-year term of director **David Redman** (Delta C).

Richard Askey (U of Wisconsin) spoke on "Fibonacci Numbers", and MMPC alumnus **Michael Bolt** (Calvin C) presented "The Geometry of Inversions".

The first-place Gold Award winner and Ford Motor Company Scholar was **John Zhou** (Detroit Country Day). The second-place Gold Award went to **Frederic Sala** (Troy High School). The third-place Gold Award went to **Jeffrey Madsen** (Groves High School). Silver Award winners at the first level were: **Vivek Behera** (Detroit Country Day) and **Maxwell Grazier-G'Sell** (Saline High School); at the second level, **Hannah Zhou** (Troy High School), **Dawson Zhou** (Troy High School), and **Andrew Cheng** (Rochester High School); at the third-level, **Peyton Shieh** (Okemos High School) and **Bohao Pan** (Cranbrook Kingswood School). In addition 41 Bronze Awards were given, and 52 students received Honorable Mention.

The top 51 students received $33,100 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 the AMS publication: *Stories about Maxima and Minima,* by V. M. Tikhomirov. We would like to thank the AMS and the Michigan Council of Teachers of Mathematics 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 6. The top 1,065 participants from Part I were invited to take Part II on December 1. There were 985 Part II participants.

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

MMPC Top 100 Statistics

- *Top Gold Award winner John Zhou is a junior, having been a Silver Award winner (first level) as a sophomore. The second-place Gold Award winner, Frederic Sala, is also a junior. He was a Bronze winner as a sophomore. The third-place Gold Award winner, Jeffrey Madsen, is a senior who was the third-place Gold Award as a junior and a Silver Award winner (third level) last year as a sophomore. That marks three years that Jeffrey has been among the top ten finalists.*
- *Of the seven Silver Award winners, three are seniors, three are juniors, and one is a freshman.*
- *Among the 41 Bronze Award winners are 16 seniors, 16 juniors, three sophomores, four freshman, and two eighth-grade students.*
- *Twenty-eight seniors, 12 juniors, six sophomores, and six freshman received Honorable Mention.*

Top MMPC Results for Each Grade

Grade	*Place*	*Score*	*Grade*	*Place*	*Score*
12	3	75.6	8	17	60.6
11	1	76.6	7	119*	35.0
10	35	51.8	6	279*	31.6
9	7	69.6	5	NA	NA

* Participants outside the top 103 are not officially ranked.

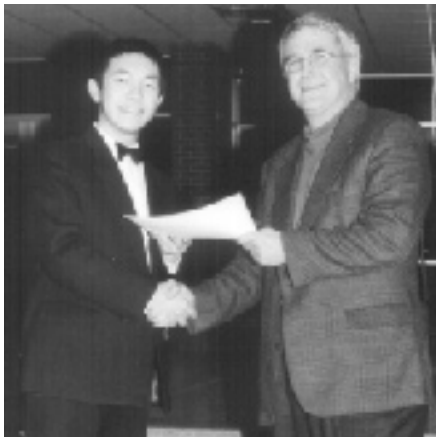
Top 103 Results by Grade

	Grade	12	11	10	9	8
Scholarships	N=51	20	21	3	5	2
Honorable Mention	N=52	28	12	6	6	0
Total	N=103	48	33	9	11	2

- *About 46% of the original contestants were female, as were about 30% of those who qualified for Part II. There were 13 young women among the Top 103 (including five 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 76.6 out of 100. The cutoff score for scholarships was 50.0. The cutoff score for the Top 103 was 43.0.*
- The cutoff score to qualify for Part II this year was 17.

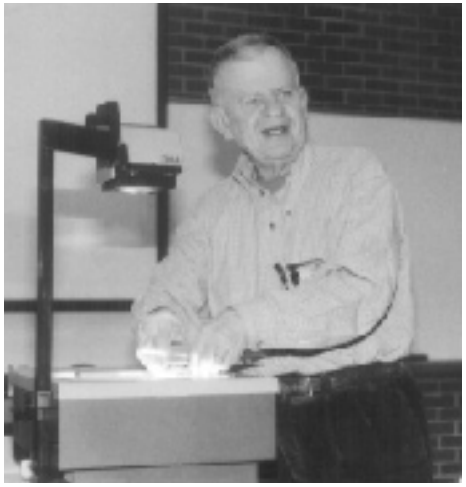
MMPC Awards Day, Delta College, February 26, 2005

Gold and Silver Award Winners. (l to r): Vivek Behera, Frederic Sala, John Zhou, Andrew Cheng, Dawson Zhou, Hannah Zhou, Jeffrey Madsen.



First place winner John Zhou is congratulated by John Fink.

Hannah Zhou is recognized as the top female contestant by Ruth Favro.

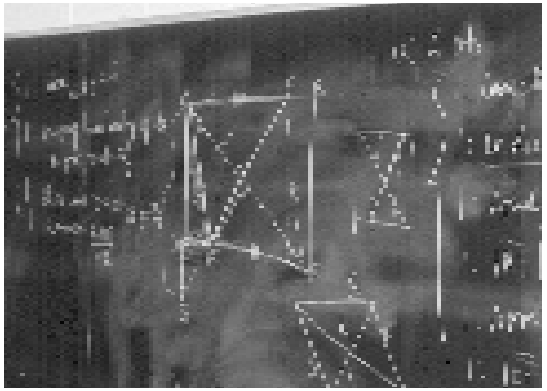


Richard Askey spoke on Fibonacci numbers.

Montaha Shamoon (LTU) and Dan Steffy (OU) volunteered on Grading Day.

John Fink, on behalf of the Michigan Section, thanks David Redman for his three-year service as MMPC Director.

Michael Bolt spoke on "The Geometry of Inversions".

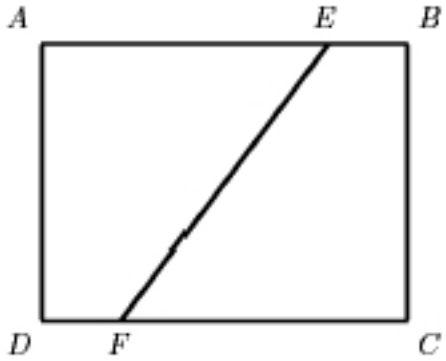


Notes on Problem 1.

48th MMPC Part II Problems

The top 985 students had 100 minutes to solve these five problems.

1. The following figure represents a rectangular piece of paper *ABCD* whose dimensions are 4 inches by 3 inches. When the paper is folded along the line segment *EF*, the corners *A* and *C* coincide.
   (a) Find the length of segment *EF*.
   (b) Extend *AD* and *EF* so they meet at *G*. Find the area of the triangle *AEG*.



2. (a) Let p be a prime number. If a, b, c, and d are distinct integers such that the equation
   $$(x-a)(x-b)(x-c)(x-d)-p^2=0$$
   has an integer solution r, show that
   $$(r-a)+(r-b)+(r-c)+(r-d)=0.$$
   (b) Show that r must be a double root of the equation
   $$(x-a)(x-b)(x-c)(x-d)-p^2=0.$$

3. If $\sin x+\sin y+\sin z=0$ and $\cos x+\cos y+\cos z=0$, prove the following statements.
   (a) $\cos(x-y)=-1/2$
   (b) $\cos(\theta-x)+\cos(\theta-y)+\cos(\theta-z)=0$, for any angle θ.
   (c) $\sin^2 x+\sin^2 y+\sin^2 z=3/2$

4. (a) Construct an infinite collection $\{A_i\}$ of infinite subsets of the set of natural numbers such that $|A_i\cap A_j|=0$ for $i\neq j$.
   (b) Construct an infinite collection $\{B_i\}$ of infinite subsets of the set of natural numbers such that $|B_i\cap B_j|$ gives a distinct integer for every pair of i and j, $i\neq j$.

5. Consider the equation $x^5+y^5=z^5$.
   (a) Show that the equation has a solution where x, y, and z are positive integers.
   (b) Show that the equation has infinitely many solutions where x, y, and z are positive integers.

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: **Eddie Cheng** (chair, OU), **John Clifford** (UM-Dearborn), **Patrick Pan** (SVSU) and **Akalu Tefera** (GVSU). 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 67 volunteers from 23 institutions around the state who attended Grading Day did a wonderful job. They are listed on the MMPC Web site.

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 them, 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.

Lastly I thank you for allowing me to serve these three years and I ask you to join me in welcoming and continuing to lend all of your practical support to the Director of the next three competitions: **Eddie Cheng**.

Student Chapter News

Andrews University

Michigan Gamma Chapter of Pi Mu Epsilon was chartered in 1970 with 17 charter members. Over the ensuing years, many students were inducted into the Chapter, but in the early nineties activity lapsed with the illness and eventual death of Professor **Harold Jones**, the Faculty Advisor. The chapter was re-activated on March 4, 2004 with the induction of 11 students and six faculty, including two emeriti. **Robert Smith** of Miami U (Ohio), National President of Pi Mu Epsilon, presided over the induction ceremony. Student officers elected were **Kami Lizarraga**, President, **Chantel Blackburn**, Vice President, and **Robert Wilson**, Secretary-Treasurer. Program meetings of the Chapter are a proper subset of the meetings of Eigen, the campus Mathematics/Physics club. • On September 24, 2004 the student officers sponsored a Group Proof Writing competition for undergraduate students, with about 25 participants in five teams. Students graded the submissions and bestowed appropriate(??) prizes(!!) upon the winning teams. This year, 14 students have qualified for induction, which is to be held April 7.

Grand Valley State University

In addition to designing new T-shirts, the Math and Stats Club will be holding a special fundraising event to commemorate Pi Day this March 14th. The key activity will be centered around a club fundraiser, which will ultimately result in one lucky department faculty member receiving a pie in the face!

Lawrence Technological University

Dennis Blumenfeld of General Motors spoke to the student chapter of MAA recently on "Mathematical Modeling in the Automotive Industry".

Michigan Undergraduate Mathematics Conference

The Michigan Undergraduate Mathematics Conference 2005 will be hosted at the campus of University of Michigan-Flint on Saturday, October 22, 2005. All students are invited to present 20-minute talks. All mathematical areas of interest are welcome. The main speaker has not yet been confirmed, and we will announce the speaker as soon as we have confirmation.

There will be a Web page for the conference for information, registration, and submission of abstracts. The page will be accessible through the mathematics department page of UM-Flint (www.flint.umich.edu/Departments/math), but please wait until May. Further information will be announced at the Section meeting in Alma in April. For any questions or information, please contact **Ricardo Alfaro** at ralfaro@umflint.edu.

Randy Pruim, Calvin C

News from the Campuses

Alma College *[reported by Mel Nyman]*

Aklilu Zeleke will be leaving us at the end of the academic year to take up a joint faculty appointment in Lyman Briggs College and the Department of Statistics and Probability at MSU. • We are looking forward to hosting the Michigan Section Annual Meeting on April 29 and 30, 2005. • **Tim Sipka** organized and conducted yet another successful MATH Challenge for college students in the Fall. Tim and **Robert Molina** continue with their very popular MATH Challenge Problem-of-the-Month for high school students. • **Mary Frances Miller**, a consulting actuary from Nashville, spent parts of two days visiting the department in January. Ms. Miller gave a colloquium talk on the actuarial profession and met individually with students to discuss the professional opportunities. She is the immediate past-president of the Casualty Actuarial Society. [nyman@alma.edu]

Alpena Community College *[reported by Dan Rothe]*

We are now almost a month into the new semester. We are happy with the enrollment of 16 students in differential equations, which is the largest number in recent memory. Our enrollments in the other math classes Trig and above are at good levels compared to slightly lower numbers for the college as a whole. • We look forward to hosting the Physics Olympics and Regional Science Olympiad for area high schools this spring. [rothed@alpenacc.edu]

Andrews University *[reported by Don Rhoades]*

The Seabird Ecology Team, an interdisciplinary research group funded in part by the National Science Foundation, includes eight undergraduate students in the departments of mathematics and biology. The team is directed by **Shandelle Henson** from Mathematics, and **James Hayward** from Biology. Four papers by the team have recently been accepted for publication in *The Auk*, *Journal of Applied Ecology*, and *Natural Resource Modeling*. **Clara Logan**, a senior mathematics student, is co-author of three of these papers. More information on the Team can be found at www.andrews.edu/~henson/seabird/seabirdhome.html. • For the past two years, **Keith G. Calkins** of the Berrien County ISD Science and Mathematics Center at Andrews, has been keyboarding and editing a manuscript by **Edward J. Specht**, Prof. Emer. and former Chair of the Mathematics Department. This manuscript is a new treatment of Geometry using independent axioms based on transformations as opposed to side-angle-side congruence. At age 89, Specht, who lives in South Bend, still actively writes and directs the project. Keith expects to complete a Ph.D. in Physics from Notre Dame this spring, under the direction of **Carol Tanner**. [dhr@andrews.edu]

Eastern Michigan University *[reported by Tim Carroll]*

K.G. Janardan retired January 1. [timothy.carroll@emich.edu]

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

GVSU has been awarded a five-year renewal of its mathematics REU program. Participating in the Summer of 2005 program are **Ed Aboufadel**, **Matt Boelkins**, **Paul Fishback**, and **Steve Schlicker**. Ed is the PI, and 11 faculty members will be involved as mentors over the grant's duration. Further program information, including online application materials, may be found at www.gvsu.edu/mathreu. [fishbacp@gvsu.edu]

Hope College [reported by Todd Swanson]

Janet Andersen has been promoted to Prof. **John Stoughton** is on sabbatical for the semester. [swansont@hope.edu]

Kalamazoo College [David Murphy]

Eric Barth and **Michele Intermont** are currently on sabbatical, while those who remain are in the midst of a job search to fill a one-year sabbatical replacement position for the 2005–2006 academic year. • In addition to job talks, **Tim Pennings** of Hope C and **Ed Packel** of Lake Forest C will give talks in our mathematics colloquium. • **John Fink**, together with visiting professors **Valentina Aguilar** and **David Hervas** from Universidad San Francisco de Quito, is writing a proposal for international funding of a training program for math and science teachers in Ecuador. • **Eric Nordmoe** has won the C. Oswald George Prize from the Editorial Board of *Teaching Statistics* for his paper, "Of Poohsticks and *p*-Values: Hypothesis Testing in the Hundred Acre Wood". • We are very proud of our Math Team (**Richard Gejji**, **Adam Granger**, **Alex Guppy**) who took First Place in this year's Michigan Autumn Take Home Challenge. [dmurphy@kzoo.edu]

Lake Superior State University [reported by Brian Snyder]

Brian Snyder has received tenure effective August 2005. • **Norma M. Agras** (Miami-Dade C) presented a workshop on College Algebra Reform March 19 on the LSSU campus. • The Higher Learning Commission has approved a Master of Arts degree: Curriculum and Instruction. The first cohort of students will begin Summer 2005. [bsnyder@lssu.edu]

Lawrence Technological University [reported by Mike Merscher]

Robofest 2005, headed by **C-J Chung**, has expanded internationally, with 14 satellite sites around the world. The finals will be held at LTU on April 23. The 36th Annual LTU High School Mathematics Competition will be held on April 24. The competition author is **Mike Merscher**. [merscher@ltu.edu]

Michigan State University [reported by Peter Lappan]

New faculty this year are **Fengbo Hang** (Ph. D. from N.Y.U., postdoc at Princeton) and **Xiadong Wang** (Ph. D. from Stanford, postdoc at M.I.T.), both Assist. Profs. The following faculty are on leave this year: **Selman Akbulut** (at MSRI), **Efstratia Kalfagianni** (at the Institute for Advanced Study), **Karen King** (at NSF), **Kenning Lu** (at Brigham Young U), **George Pappas** (at the Institute for Advanced Study), **Joel Shapiro** (at U Hawaii), and **Alexander Volberg**. A visitor is **Gerard Venema**, on sabbatical from Calvin C. **David Blair** and **Peter Lappan** have retired. • The Richard Phillips Memorial Lectures were given by **Noam Elkies**, from Harvard, in January, on the subject of "Error Correcting Codes and Algebraic Geometry". [plappan@math.msu.edu]

Oakland University [reported by Jerry Grossman]

Neil Sloane, creator of the On-Line Encyclopedia of Integer Sequences (www.research.att.com/~njas/sequences), gave a fascinating colloquium talk on February 15. • Our Engineering School is asking that we revert to the curriculum of 30 years ago, where rather than having separate courses in Linear Algebra and Differential Equations, we have one course treating both topics (necessarily somewhat less in depth, because we'd be going from 6 credits to 4). Are other universities also taking this approach? They claim that it is ultimately driven by certain requirements of their accrediting body. [grossman@oakland.edu]

Saginaw Valley State University [reported by Tom Zerger]

Jan Hlavacek (Ph.D. Ohio State U, Complex Analysis) and **Amy Hlavacek** (Ph. D. Ohio State U, Topological Graph Theory) join us as Instructors. Jan and Amy came to us from the U of Saint Francis in Fort Wayne, Indiana. • **Cyrus Aryana** received tenure and has been promoted to Assoc. Prof., and **Steve Sepanski** has been promoted to Prof. • **Patrick Pan** is acting Assistant Dean in the College of Science, Engineering and Technology this year. • **Nancy Colwell** was elected Secretary/Treasurer of the Michigan Section for 2004–2006. • **Gretchen Mooningham** received a grant from the AWM for the support of a Sonia Kovalevsky High School Mathematics Day, which was held December 10 with about 300 area high school girls attending. The Sonia Kovalevsky Day is supported by Elizabeth City State University and the National Security Agency. • A new course, The Mathematical Foundations of Actuarial Science, is being offered this semester. [Zerger@svsu.edu]

Schoolcraft College [reported by Randy Schwartz]

Department Chairperson **Janina Udrys** retired in Summer 2004 after an outstanding 34-year teaching career at Schoolcraft. **Lois Bearden** succeeded her as Chairperson in the Fall. [rschwart@schoolcraft.edu]

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

John Dwyer was recently honored for 35 years service to the school. • We now have Maple 9.5 on the computers in all of the Computer Labs on Campus. • In April we will hold weekend Enrichment classes for some 600 students, grades 4–12, to interest them in Mathematics and Science. In May and June, along with Ford Motor Co. and the Society of Manufacturing Engineers, we will sponsor a number of hands-on activities for high school students, geared toward interesting them in Engineering and the Sciences. [oneilljd@udmercy.edu]

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

We will host the Lower Michigan Mathematics Competition on Saturday, April 2, 2005. Teams of up to three students compete in this state competition solving ten challenging problems. • UM-F will host the Michigan Undergraduate Mathematics

Conference on Saturday, October 22, 2005. Preparations are well under way. We encourage faculty to work with undergraduate students in research projects so that students can present their results at this popular conference. For more information about either event contact **Ricardo Alfaro** at ralfaro@umflint.edu. [salthoen@umflint.edu]

Wayne State University *[reported by Daniel Frohardt]*

The department's Undergraduate Research Group has expanded to a dozen students working with four faculty members. • **John Ewing**, Executive Director of the AMS and former Editor of the *American Mathematical Monthly*, spoke to a group of mathematicians and librarians on "The Future of Journals" here on January 11. • The department's colloquium schedule can be found at: www.math.wayne.edu/research/seminars/colloq.html. [danf@math.wayne.edu]

Western Michigan University *[reported by Paul Eenigenburg]*

Chris Hirsch was awarded the James H. Powell Professor of Mathematics named Professorship. • During the past year, the department awarded five Ph.D. degrees: **Archara Chaiyakarn**, **Ralucca Gera**, and **Pariwatana Pacheenburawana** in mathematics; **Jihwa Noh** and **Kathryn Shafer** in mathematics education. [paul.eenigenburg@wmich.edu]

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 April 29, 2005 at Alma College during the Annual Meeting. One of the major items of business is the election of officers. The Nominating Committee, chaired by **Steve Schlicker** (GVSU), will propose a slate of candidates. **John Fink** (Kalamazoo C), currently the Four-Year College Vice-Chair, will, in keeping with tradition, be nominated for Chair. **Janet Andersen** (Hope C) will be nominated for Four-Year College Vice-Chair. **Mark Naber** (Monroe CC) will be nominated for Two-year College Vice-Chair. 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.

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

DISCOVER A NEW WORLD OF EDUCATION

Sponsored by the United States Department of State, the Fulbright Teacher and Administrator Exchange arranges direct one-to-one classroom exchanges to over 30 countries for teachers at all levels. Most exchanges occur for an academic year. Argentina, Mexico, and the United Kingdom offer fall-semester exchanges. The United Kingdom and Morocco offer six-week exchanges.

In addition to the teacher exchanges, there are administrative exchange opportunities in Argentina, Bulgaria, Canada, the Czech Republic, Estonia, Finland, Mexico, Romania, the Slovak Republic, Thailand, Turkey, and the United Kingdom. Jordan and Uruguay currently offer opportunities to host incoming administrators during site visits to the United States. Germany offers a two-week special program for U.S. principals to study school systems there for several weeks.

The program also offers eight-week seminars in Italy or Greece for teachers of Italian, Latin, Greek, or the Classics.

Prospective applicants must meet the following general eligibility requirements:

U.S. Citizenship
Fluency in English
Bachelor's degree or higher
Be in at least third year of full-time teaching
A current full-time position

The application deadline is October 15, 2005 for the 2006–2007 program year. For more information and/or an application please visit our Web site: www.fulbrightexchanges.org or call 800-726-0479.

Thanks are due to David Redman of Delta College for his dedicated service as Director of the Michigan Mathematics Prize Competition for the past three years. His daughter Hannah is hoping to see more of him.

Alma in April

Sustaining 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 2004–2005, as of February 26, the 51 members of the Section listed below are sustaining members. The Section is grateful to those several individuals who generously exceeded the suggested sustaining member contribution. 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, Steven
Baartmans, Alphonse
Bix, Robert
Bosier, Edward
Bragg, Mary L.
Buckley, Joseph T.
Cash, Donna
Daniel, Arthur
Dickinson, William
Dudziak, James
Eenigenburg, Paul
Fleming, Richard
Frohardt, Dan
Gardiner, Chris
Gilpin, Michael
Gioia,Tony
Graham, Sidney
Grossman, Jerry
Ham, Jim
Hammel, Arnold
Höft, Margret
Kaplan, Wilfred
Kasten, Virginia Gielincki
Kiltinen, John
Lappan, Glenda
Marchand, Margaret O.
McLaughlin, Renate
Miles, Tom
Moore, W. Keith
Mosier, Ronald G.
Myers, Robert
Nyman, Melvin A.
Petro, John W.
Rahn, Joan M.
Redman, David
Richert, Norman
Sherburne, Frank C., Jr.
Slaby, Harold
Sledd, William T.
Smyrski, Larry
Stich, Philip
Tanis, Elliot
Trojanowski, Willian
Van Zwalenberg, George
Venema, Gerard
Verdonk, Sylvia
Warren, Bette
Wyneken, Matthew
Xeras, Robert

COMMITTEES AND APPOINTMENTS

Michigan Section

Mathematical Association of America

Contact Information

Executive Committee

Chair	Gerard Venema (05)	Calvin C	venema@calvin.edu	616-526-6402
Vice Chair	Mark Naber (05)	Monroe County CC	mnaber@monroeccc.edu	734-384-4254
Vice Chair	John Fink (05)	Kalamazoo C	fink@kzoo.edu	616-337-7062
Sec/Treas	Nancy Colwell (07)	SVSU	nccolwel@svsu.edu	989-964-4353
Past Chair	Steve Schlicker (05)	GVSU	schlicks@gvsu.edu	616-331-2305
Governor	Ruth Favro (07)	LTU	favro@ltu.edu	248-204-3531

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	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
Member	Akalu Teferra (08)	GVSU	teferaa@gvsu.edu	616-331-3746

Program Committee: 2005 Annual Meeting

Co-Chair	John Fink (05)	Kalamazoo C	fink@kzoo.edu	616-337-7062
Co-Chair	Mark Naber (05)	Monroe County CC	mnaber@monroeccc.edu	734-384-4254
Member	Christine Browning (05)	WMU	browning@wmich.edu	616-387-4561
Member	David Murphy (05)	Kalamazoo C	dmurphy@kzoo.edu	616-337-7062
Member	Timothy A. Sipka (05)	Alma C	sipka@alma.edu	989-463-7234

Local Arrangements Committee: 2005 Annual Meeting

Chair	Mel Nyman (05)	Alma C	nyman@alma.edu	989-463-7264
Member	Frances Lichtman (05)	Alma C	lichtman@alma.edu	989-463-7182
Member	Robert R. Molina (05)	Alma C	molina@alma.edu	989-463-7197
Member	John F. Putz (05)	Alma C	putz@alma.edu	989-463-7253
Member	Timothy A. Sipka (05)	Alma C	sipka@alma.edu	989-463-7234
Member	Aklilu Zeleke (05)	Alma C	zeleke@alma.edu	989-463-7263

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	John Stoughton	Hope C	stoughton@hope.edu	616-395-7526

Distinguished Service Award Committee

Chair	Steve Schlicker (06)	GVSU	schlicks@gvsu.edu	616-331-2305
Member	John Mooningham (05)	SVSU	jwm@svsu.edu	989-964-4183
Member	Gerard Venema (07)	Calvin C	venema@calvin.edu	616-526-6402

Distinguished Teaching Award Committee

Chair	John B. Fink (05)	Kalamazoo C	fink@kzoo.edu	616-337-7062
Member	Steve Kahn (06)	WSU	skahn@math.wayne.edu	313-577-3471
Member	Brian McCartin (07)	Kettering U	bmccarti@kettering.edu	810-762-7802

Nominating Committee

Chair	Steve Schlicker (05)	GVSU	schlicks@gvsu.edu	616-331-2305
Member	Mark Naber (05)	Monroe County CC	mnaber@monroeccc.edu	734-384-4254
Member	Bette Warren (05)	EMU	Bette.Warren@emich.edu	734-487-1444

Audit Committee

Member	Chris Gardiner	EMU	cgardiner@emich.edu	734-487-3386
Member	Gerald D. Ludden	MSU	ludden@math.msu.edu	517-353-6335

MMPC Audit Committee

Member	Margret Höft (04)	UM-Dearborn	mhoft@umd.umich.edu	313-593-5007
Member	John Mooningham (04)	SVSU	jwm@svsu.edu	989-964-4183

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 Dir.	Kristina D. Hansen	UM-Flint	khansen@umflint.edu	810-762-3304
WAM	Toni Carroll	Siena Heights U	toni@alpha.sienahts.edu	517-264-7658
Liaison Coord.	Reva Kasman	GVSU	kasmanr@gvsu.edu	616-331-8561
Archivist	John W. Petro	WMU	john.petro@wmich.edu	269-342-6817
Mich NExT	Randall Pruim	Calvin C	rpruim@calvin.edu	616-526-7113
Mich NExT	Matthew Boelkins	GVSU	boelkinm@gvsu.edu	616-331-3384
MCTM Lia.	Ruth Favro (07)	LTU	favro@ltu.edu	248-204-3531

Michigan Section–MAA Web Site
www.michmaa.org

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

THE MATHEMATICAL ASSOCIATION OF AMERICA

P.O. Box 90973 • Washington, DC 20090-0973
Telephone (800) 331-1622 US and Canada Only
(301) 617-7800 International • Fax (301) 206-9789
Email member@maa.org • Website www.maa.org

2005 INDIVIDUAL MEMBERSHIP FORM

1. APPLICANT INFORMATION

Prefix: ______ First Name: ______ Middle Initial: ______ Last Name: ______

Street Address 1: ______

Street Address 2: ______

City: ______ State: ______ Zip: ______

Telephone: ______ Email: ______ Date of Birth: ______

Highest Degree Earned: ______ Year Awarded: ______ Awarding Institution: ______

Employer: ______ Position: ______

2. SELECT YOUR OPTIONS

All members receive FOCUS, the official newsletter of the MAA.

Please activate my (check one)

- ❑ 1 JOURNAL MEMBERSHIP $99.00
- ❑ 2 JOURNAL MEMBERSHIP $109.00
- ❑ 3 JOURNAL MEMBERSHIP $119.00

Receiving

- ○ THE AMERICAN MATHEMATICAL MONTHLY (10 ISSUES)
- ○ MATHEMATICS MAGAZINE (5 ISSUES)
- ○ THE COLLEGE MATHEMATICS JOURNAL (5 ISSUES)

INTRODUCTORY RATE FOR <u>FIRST TIME</u> MAA MEMBERS ONLY. OTHERS CALL 1-800-331-1622 FOR RATE INFORMATION.

3. ADD A SIGMAA

*Adding a SIGMAA membership requires a small additional fee

- ❑ SIGMAA FOR BUSINESS INDUSTRY AND GOVERNMENT... $10.00
- ❑ SIGMAA ON ENVIRONMENTAL MATHEMATICS $10.00
- ❑ SIGMAA ON THE HISTORY OF MATHEMATICS $10.00
- ❑ SIGMAA ON THE PHILOSOPHY OF MATHEMATICS $10.00
- ❑ SIGMAA ON RESEARCH IN UNDERGRADUATE MATHEMATICS EDUCATION.................... $10.00
- ❑ SIGMAA ON STATISTICS EDUCATION.................... $10.00
- ❑ SIGMAA on Mathematics Instruction Using the Web $10.00
- ❑ SIGMAA on Quantitative Literacy......................$10.00

* Include your email address above.

TOTAL REMITTANCE: $ ______

4. PAYMENT INFORMATION

Check enclosed made payable to Mathematical Association of America
(US funds/US bank required)

Charge my credit card:

❑ VISA ❑ MasterCard

Account #: ______ Exp. Date: ______

Signature: ______

Telephone to:
800/331-1622 *(toll free)*
301/617-7800 *(outside US)*

Mail to:
P.O. Box 90973
Washington, DC 20090

Fax to:
(301) 206-9789

A05WEB