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Michigan Section–MAA *Newsletter*
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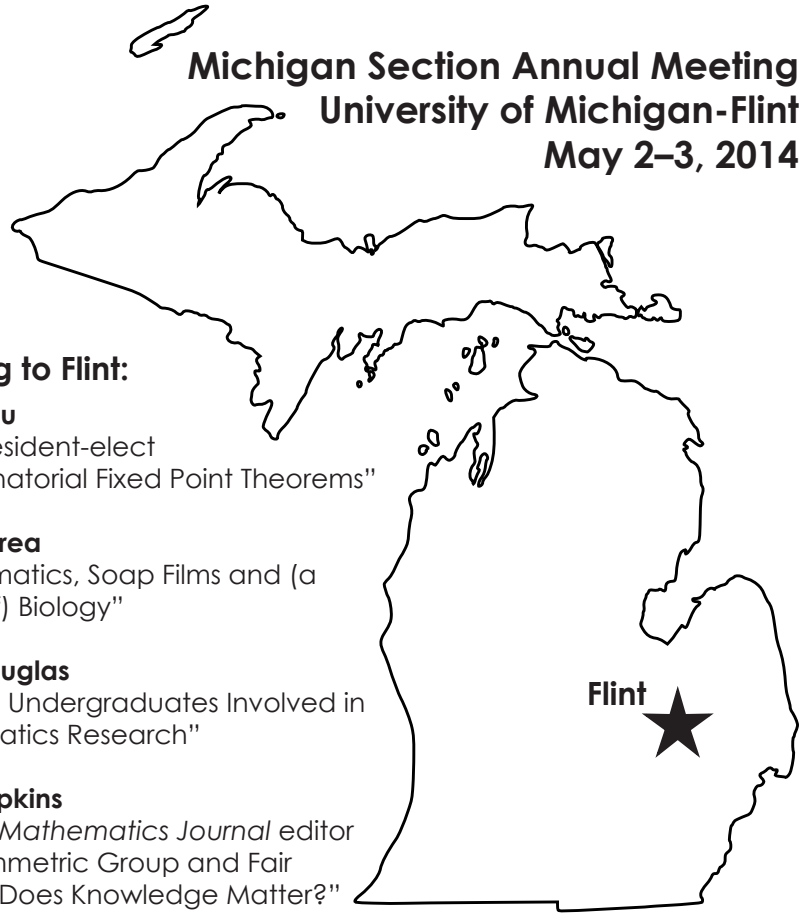
MAA
MATHEMATICAL ASSOCIATION OF AMERICA

Michigan Section–MAA NEWSLETTER

Volume 40, Number 2 **April 2014**

Michigan Section Annual Meeting
University of Michigan-Flint
May 2–3, 2014



Coming to Flint:

Francis Su
MAA president-elect
"Combinatorial Fixed Point Theorems"

John Oprea
"Mathematics, Soap Films and (a Touch of) Biology"

Lloyd Douglas
"Getting Undergraduates Involved in Mathematics Research"

Brian Hopkins
College Mathematics Journal editor
"The Symmetric Group and Fair Division: Does Knowledge Matter?"

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Mathematical Association of America
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sections.maa.org/michigan

Abbreviations

C = College
CC = Community College
CMU = Central Michigan U
EMU = Eastern Michigan U
FSU = Ferris State U
GVSU = Grand Valley State U
HS = High School
KU = Kettering U
LSSU = Lake Superior State U
LTU = Lawrence Technological U
MS = Middle School
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

Michigan Section–MAA Annual Meeting
2014: UM-Flint | May 2–3
2015: Hope College

Upper Peninsula Regional Mathematics Meeting
2014: Northern Michigan University | October 3–4

MAA-AMS Joint Mathematics Meetings
2015: San Antonio, TX | January 10–13
2016: Seattle, WA | January 6–9
2017: Atlanta, GA | January 4–7
2018: San Diego, CA | January 10–13
2019: Baltimore, MD | January 16–19

MAA MathFest
2014: Portland, OR | August 7–9
2015: Washington, DC | August 5–8
2016: Columbus, OH | August 3–6
2017: Chicago, IL | July 26–29
2018: Denver, CO | August 1–4
2019: Cincinnati, OH | July 31–August 3

AMATYC Annual Conference
2014: Nashville, TN | November 13–16
2015: New Orleans, LA | November 19–22
2016: Denver, CO | November 17–20
2017: San Diego, CA | November 9–12
2018: Orlando, FL | November 15–18

NCTM Annual Meeting & Exposition
2014: New Orleans, LA | April 9–12
2015: Boston, MA | April 15–18
2016: San Francisco, CA | April 13–16

Organizational Websites

MAA	maa.org
Mich. Section	sections.maa.org/michigan
NCTM	nctm.org
MCTM	mictm.org
AMATYC	amatyc.org
MichMATYC	michmatyc.org
MMPC	sections.maa.org/michigan/mmpc
HSVLP	michhsvlp.weebly.com
MiNExT	hillsdalesites.org/personal/dmurphy/MiNExT.html

Annual Meeting, May 2–3

Spring is right around the corner! As I write this, I sure hope that's true. We've had plenty of winter in Michigan this year. With spring, of course, comes our annual Section meeting. We're planning a good meeting, but it will only be great if you, the Section members, come! **Brian Hopkins** from Saint Peter's University, the current editor of the *College Mathematics Journal*, will be joining us. **John Oprea** from Cleveland State University, **Lloyd Douglas** from UNC-Greensboro, and **Francis Su** from Harvey Mudd College will also be journeying to Flint to spend time with us. Distinguished Teaching Award winners, soap-bubble makers, and textbook writers . . . there's sure to be some good times. There'll be a special session on the Michigan Transfer Agreement (which you can read more about in **Frances Lichtman**'s column on page 6), something for our Michigan NExTers, and a host of local folks who've agreed to speak as well: **Stephen DeBacker** and **Patricio Herbst** from UM-Ann Arbor, **Brin Keller** from MSU, **Libin Rong** from Oakland University, and the Governor of our Section, **Matt Boelkins** from GVSU.

The local arrangements committee at UM-Flint has compiled all the relevant local information on the web, and has made registering as easy as clicking on a button (well, and having your credit card handy). Check it out at umflint.edu/math/2014-annual-meetings-maa. The program will be posted on the website when it is available, so check back a few times in April.

The program committee and the Section officers look forward to welcoming you to Flint on May 2 and 3!

Michele Intermont (Kalamazoo C),
Four-Year College Vice Chair

UM-Flint in May

Governor's Report

This past January, I attended the Joint Mathematics Meetings (JMM) in Baltimore, MD. Sixteen years ago, in 1998, I attended my first Joint Meetings as a finishing PhD student, in that very same city. Throughout my visit to Baltimore in 2014, I was feeling nostalgic, in part due to multiple realizations of how much I have benefited from the MAA.

Early on, I benefited immensely from participating in Project NExT, where I met both new ideas for teaching and new professional friends. And while that organization within the MAA got me started, it has been through MAA journals, national meetings, and Section meetings that I've had regular opportunities to learn new mathematics, explore new ideas for teaching, and build collaborative professional relationships that have made my career much, much richer. Sixteen years into my career, I'm deeply grateful to be part of this community, and excited to think of all the good things that lie ahead. Whether you're early in your career or well established, I can't encourage you strongly enough to seek ways to become even more involved with the Mathematical Association of America.

As I noted in my fall report, the MAA is working diligently to improve communication with its members and society at large. Our website at maa.org has been completely redesigned and is much easier to navigate. Through the prominent login link for members at the top, and the three links on the right of the home page under "Member Focus", you have the chance to get started, get connected, and get involved with and through the MAA. If you are not presently a member of the MAA, I urge you to strongly consider joining. For a fee of just $169 per year, members receive electronic subscriptions to all five MAA publications (*The American Mathematical Monthly*, *The College Mathematics Journal*, *Mathematics Magazine*, *Math Horizons*, and *MAA FOCUS*), plus a print subscription to *MAA FOCUS*, membership in the Michigan Section, deep discounts on JMM, MathFest, and MAA publications, and more.

A current MAA project that is nearing completion is the 2015 CUPM Curriculum Guide. CUPM stands for "Committee on the Undergraduate Program in Mathematics"; the curriculum guide, updated once a decade, is a comprehensive document that provides recommendations to departments for the undergraduate curriculum. You can see the most recent version, from 2004, at http://bit.ly/1f0dlfj, and I will publicize the newest version in my first report after the 2015 guide is publicly available. I have been fortunate to participate in several different focus groups, reading preliminary portions of the report, and I have been thoroughly impressed: without being overly prescriptive, the Curriculum Guide provides resources and wisdom to shape individual courses, major emphases, and indeed entire programs. Any department seeking new opportunities, program revisions, or assessment-related benchmarks will find a trove of valuable information in this project. The 2015 CUPM Curriculum Guide is emblematic of much that I know of the MAA: an organization with talented and dedicated members who want to share experiences and expertise in order to make both themselves and others even better in the teaching and learning of mathematics. Dozens and dozens of our colleagues have contributed to the development of the Curriculum Guide, and I urge you to find a way to take advantage of its offerings.

Another exciting MAA resource that has recently emerged is its YouTube channel. As more and more educators are using video to support the mathematical education of their students, it is fitting that our professional society is doing likewise to support the learning of its members. At youtube.com/user/MAAvideo, you will find videos of the MAA's Distinguished Lecture Series, numerous popular shorter videos, and even videos from select recent meetings.

In the midst of this hearty Michigan winter, I'm more than ready for spring. I know that we'll all find warmer weather along with the warmth of good company and stimulating ideas at our annual Section meeting at UM-Flint on May 2 and 3, which is being advertised in several other portions of this newsletter. I hope that you'll both attend and participate. The next two national meetings of the MAA are MathFest 2014 in Portland, Oregon, August 7–9, and the 2015 Joint Meetings in San Antonio, January 10–13. Also, don't forget the MAA Centennial in 2015, which will be held in Washington, DC.

If you will be present at any or all of these events, I'd welcome the

Governor's Report continued on page 5

Chair's Report

As I sit writing this message with snow falling outside my window, I look forward to the warmer weather that's around the corner. The approach of spring means it's time to begin planning for the 2014 Annual Meeting of the Section that will be held in mid-Michigan this year at the campus of the University of Michigan-Flint on May 2 and 3. Believe it or not, the last time UM-Flint hosted the meeting, in 1990, I gave a talk as a senior just finishing my undergraduate degree. It was a great experience. Though I was very nervous, I still remember a plenary talk on Penrose tiles made by **John Horton Conway**. Returning to my hometown to attend this spring's meeting as a member of the Section and chair of the executive committee will be extra special to me. My thanks go to **Ricardo Alfaro** (UM-Flint) and the rest of the local arrangements committee for all of their hard work preparing for the meeting. I also want to thank **Michele Intermont** (Kalamazoo C) for serving as chair of the program committee for the meeting. Michelle and the rest of the program committee have worked hard to put together an excellent schedule of plenary and local speakers, including the president-elect of the MAA, **Francis Su**. Please see elsewhere in this *Newsletter* for more information concerning schedules and registration. Also, let my example be a reminder that the meeting is an excellent opportunity for both undergraduate and graduate students to make professional contacts and give presentations in a supportive environment.

This year we had another excellent experience running the Michigan Mathematics Prize Competition (MMPC) under the direction of **Stephanie Edwards** (Hope C). This competition is an important venue where the Section supports and celebrates the mathematical talent of high school students throughout the state. After an excellent term as director, Stephanie is stepping down this year—though she will continue serving the Section as our new webmaster. I am happy to announce that **Kim Rescorla** (EMU) has agreed to be our next MMPC director and that **Carla Tayeh** (EMU) will be his co-director. Thank you to Stephanie for her time, hard work, and dedication to the MMPC, and to Kim and Carla for carrying the torch forward for the next few years.

By the time you read this, the 2014 Michigan Undergraduate Mathematics Conference (MUMC), held on the campus of Eastern Michigan University on Saturday, March 8, will be history. I need to thank the EMU mathematics department for hosting the event and **Andrew Ross** (EMU) in particular for leading the organization of this event. This conference provides an opportunity for undergraduates to present and discuss mathematics with their peers, and it is an important venue wherein students get to meet members of the Section as they consider further studies and careers in science, technology, engineering, and mathematics (STEM).

It is also noteworthy that this *Newsletter* will be the last one in its current format. As announced last fall, the Section is moving towards publishing the *Newsletter* online, which will have a number of advantages to the Section in terms of both content and cost. We are not planning to forgo the printed page completely, however, and plan to couple the online *Newsletter* with a short, printed flyer with headlines, highlights, and information concerning Section activities and events. I want to thank **Katie Ballentine** (Mathematical Reviews) for taking on the role of editor of the *Newsletter* last year and navigating the transition to the new format.

Finally, as I report the Section's activities and thank select individuals for their service to the Section, I am humbled by the amount of time and work so many of our members volunteer to support the Section. By organizing and running the Section's activities and events, all of you promote mathematics and foster a community dedicated to supporting current and future mathematicians in our state. Thank you.

Steve Blair (EMU), Chair

Governor's Report continued from page 3

opportunity to connect with you to discuss the state of mathematics in Michigan, the work of the Michigan Section, or the efforts of the MAA generally. Indeed, please feel free to contact me at boelkinm@gvsu.edu at any time to share ideas, raise concerns, or start a conversation about an issue of importance to you that is related to any interest of the MAA.

Matt Boelkins (GVSU), Governor

Math Recommendations from the Michigan Transfer Agreement

In response to language that the Michigan legislature included in a 2012 appropriations bill, the new Michigan Transfer Agreement (MTA) has been designed to improve transferability of core college courses between community colleges and four-year colleges and universities. The MTA is a revision of the current Michigan Association of Collegiate Registrars and Admissions Officers (MACRAO) Transfer Agreement. A goal of the MTA is to establish requirements that would fulfill many of the general education requirements at Michigan universities. Among the changes is a new math requirement of one college-level course in mathematics.

The MTA Math Taskforce, composed primarily of community college and university math faculty and a few academic administrators, developed recommendations for three math pathways to be embedded within the MTA. The intent was to define the competencies for each pathway at sufficient rigor to allow the corresponding courses to transfer.

The College Algebra Pathway, for students proceeding to STEM programs or other programs that require background in algebra, describes a course with a prerequisite skill level of Intermediate Algebra, high school Algebra II, or equivalent content. Topics that should be part of a course in this pathway include functions, polynomials of degree greater than two, rational functions, exponential functions, inverse functions, logarithms, and graphing by transformation. The CRAFTY College Algebra Guidelines have been referenced for this pathway.

The Statistics Pathway, for students proceeding to programs in business or social sciences, describes a course with a prerequisite skill level of at least Beginning Algebra, high school Algebra I, or equivalent content. Topics that should be part of a course in this pathway include probability, descriptive statistics, and inferential statistics, including hypothesis testing, *p*-values, confidence intervals, and linear regression. The course should incorporate both formula-based and technology-based approaches. The GAISE College Report on statistics education has been referenced for this pathway.

The Quantitative Reasoning Pathway, for students proceeding to programs not requiring statistics or calculus, also describes a course with a prerequisite skill level of at least Beginning Algebra, high school Algebra I, or equivalent content. Topics that should be part of a course in this pathway include mathematical modeling and applications utilizing numeric, symbolic, and graphical methods. Examples include linear and nonlinear models, financial models, symbolic logic, networks and graphs, probability and counting, statistical reasoning, voting theory, geometric models, and game theory.

Through partnership between MichMATYC and the Michigan Section–MAA, the Math Taskforce recommendations have been broadly circulated statewide to solicit input. A consensus-building effort to create guidelines that would facilitate the transition between community colleges and four-year colleges and universities led to the development of these recommendations. Implementation of the MTA is expected in fall 2014.

Frances Lichtman (Delta C), Two-Year College Vice Chair

The Two-Body Problem

By Jerry Grossman

, two massive orbs, floating thickly through black
impeded void, aimless, sluggish, and try-
ing on toward infinite nowhere, they pass
one moment, quite by chance, and suddenly
the newton god decrees that mass should bend
the einstein space accelerate the orbs,
who laugh with glee as hopelessly they tend
together, now alive, but soon a corpse,
the life is gone, the eccentricity
exceeded one, you see, they separate,
forever, random, hyperbolically,
as predetermined all along, too late,
yet somehow each is changed, the atoms re-
arranged, perhaps a clouded memory,

Secretary/Treasurer's Report

I would like to thank everyone who has sent in a voluntary Section dues payment for 2013–2014. At this time there are 100 dues-paying members. Fifty-four of these are sustaining members who have paid dues of $30 or more, and they are listed on page 10. In these challenging financial times, your willingness to support the Section's activities is especially appreciated. I would like to thank **William Jackson** for his continued support of the Ron Mosier Award as a supplement to his voluntary dues. His contribution will guarantee that the Section can continue to recognize the outstanding student talk at the Annual Meeting.

In addition, we now have 17 institutional members. This list can be found on page 11. If your school is not listed, you might want to remind your department chair to attend to this matter. If your department has not yet sent in a dues payment and wishes to do so, the membership form can be found on page 11. Last year at this time there were 111 dues-paying individual members, including 55 sustaining members, and 25 institutional members, so our contributing member numbers are fairly stable.

The Michigan Section's current bank balance is $2830.83. We continue to have a good balance of income and expenses, and the Section remains in sound financial shape.

MAA book sales will continue at the Annual Meeting. Once again, the Washington office of the MAA will provide all Section members, not just those attending the meeting, with a 35% discount coupon code that can be used to order MAA books online within one week (before or after) of the meeting. Books ordered through this alternative, like books ordered at the meeting itself, will gain the Section a 10% commission. Further details about this program will be available from your department's MAA liaison or at the Section meeting.

If you have any questions regarding the Section's finances, please feel free to contact me (mbollman@albion.edu).

Mark Bollman (Albion C), Secretary/Treasurer

Webmaster's Report

I am now completing my fifth and last year as webmaster. I thank all of the people who have been on the Executive Committee these past five years; it has been a pleasure to work with you. Special thanks go to my predecessors **Scott Barnett** (Henry Ford CC) and **Earl Fife** (Calvin C); both were a great help when I was starting out. I also thank the technical support staff at the national MAA headquarters; they were very helpful when we made the transition to the new website.

Sid Graham (CMU)

Sustaining Members 2013–2014

The Michigan Section dues structure includes a sustaining member category for those who make a $15 contribution beyond the basic dues rate of $15. As of mid-March, the 54 Section members listed below are sustaining members for 2013–2014. 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 11, and please be generous!

Edward Aboufadel
Katie Ballentine
Hyman Bass
Larry Beauchamp
Andreas Blass
Mary Bragg
Robert Bruner
Joseph Buckley
Tim Carroll
Adam Cloutier
Nancy Colwell
Anthony Crachiola
James Dudziak
Peter Duren
John Dwyer
Paul Eenigenburg
Graeme Fairweather
Ruth Favro
John Fink
Dan Frohardt
Christopher Gardiner
R. Kent Gilbert
Tony Gioia
Sidney Graham
Jerry Grossman
Jim Ham
Margret Höft
Daniel Isaksen
William Jackson
Gerald Janusz
John Kiltinen
Harry Kwon
William Lewis
Frances Lichtman
László Lipták
Tom Miles
Jack Miller
Robert Myers
Valerian Nita
Mel Nyman
Gene Ortner
John Petro
Richard Pineau
David Redman
Norman Richert
Bruce Sagan
Carl Sinke
Eliot Tanis
Richard Vandervelde
Gerard Venema
Sylvia Verdonk
Matt Wyneken
Robert Xeras
Jennifer Zhao

Institutional Members 2013–2014

As of mid-March, the 17 institutions listed below have begun or renewed their institutional memberships in the Michigan Section for 2013–2014. Tardy institutions and others who wish to join are encouraged to send in their dues, using the form below.

Albion College
Central Michigan University
Glen Oaks Community College
Grand Valley State University
Henry Ford Community College
Hillsdale College
Hope College
Kettering University
Mathematical Reviews
Michigan State University
Oakland University
Olivet College
Saginaw Valley State University
Spring Arbor University
University of Michigan-Ann Arbor
Wayne State University
Western Michigan University

Michigan Section Dues

The 2013–2014 individual and institutional membership dues for the Michigan Section are now being accepted. The $15 individual dues payment (or $30 sustaining member payment) and the $40 (small school) or $70 (large school) institutional dues help support the activities of the Section, such as the Annual Meeting and the *Newsletter*. This coupon may be used to submit dues payments.

Enclosed is a check for:
- ❑ $15 regular dues
- ❑ $30 sustaining membership
- ❑ $40 small institution dues
- ❑ $70 large institution dues

Name _____

Institution _____

Mailing address _____

_____

Email address _____

Make checks payable to Michigan Section–MAA, and mail them to Mark Bollman, Secretary/Treasurer, Michigan Section–MAA, Department of Mathematics and Computer Science, Albion College, Albion, MI 49224-5013.

Gavin LaRose Wins Haimo Award

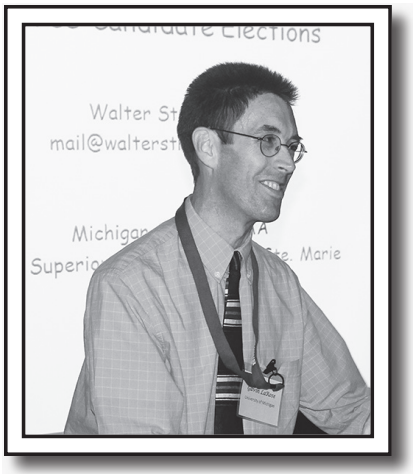
At the 2014 Joint Mathematics Meetings in Baltimore, MD, **Gavin LaRose** of the University of Michigan was one of three recipients of the MAA's annual Haimo Award, the highest teaching honor the association bestows. For 20 years, Gavin has been an exemplary mathematics instructor and a leader in supporting others' development as teachers.

A member of the first Project NExT class of Fellows in 1994, Gavin impressed the leadership of Project NExT so much that just three years later he was invited to join the leadership team. Over the next 15 years, Gavin supported the professional development of over 1000 Project NExT Fellows. In an article honoring his service to Project NExT, **Aparna Higgins** and **Christine Stevens** observed that throughout his service to Project NExT, Gavin's "technological savvy and insight into the process of implementing new teaching strategies proved invaluable" and that he regularly offered "in his own, inimitable fast-paced but intensely communicative style, a popular workshop session on using writing projects in the teaching of mathematics".

Matt DeLong, Professor of Mathematics at Taylor University, first met Gavin when he himself was a Project NExT Fellow in 1999, and now serves on the Project NExT Leadership team. After many years of knowing and observing Gavin's work, he says, "Gavin's work with Project NExT gave a superb outlet to his seemingly boundless energy and infectious enthusiasm for mathematics, teaching, and technology. He was a friend and an encourager to all those with whom he came into contact, and his passion for the profession of teaching undergraduate mathematics was a model for over a thousand new faculty members who went through the program while he was on the leadership team."

Gavin's colleagues at the University of Michigan have been similarly impressed with his work; **Karen Rhea**, Lecturer Emeritus and herself a winner of the Haimo Award, shares that in addition to coordinating many of the courses in Michigan's undergraduate program, he provides structure that has improved their assessment of courses and efficiency in so doing. Moreover, he regularly supports the training and mentoring of new instructors, offering personalized help through visiting their classes. In his own work, "Gavin makes students and student learning his priority. His evaluation numbers and the comments from students are indisputable—he invigorates and inspires his students. He has contributed those same qualities to those of us who work with him, the hundreds of NExT Fellows, and the many, many others who use his thoughtful and mathematically sound technological contributions."

Stephen DeBacker, Arthur F. Thurnau Professor of Mathematics at Michigan, wrote Gavin's nomination for a separate teaching award at Michigan, calling him "the best person in the world when it comes to developing sensible and functional technology that helps students learn math, faculty teach math, and administrators manage the math world". Moreover, DeBacker notes that Gavin is one of Michigan's best instructors and plays a critical role in the department's highly successful teacher training/mentoring program.



Gavin LaRose at the Michigan Section Annual Meeting at Lake Superior State Univesity in May 2013

Of course, Gavin's students are perhaps the strongest testimonial for why he was such a deserving recipient of the Haimo Award. One wrote: "I have never seen a man so excited about what he teaches, and I have never been taught by a professor with the level of enthusiasm and commitment to the subject that he teaches. He took what is often a difficult class for undergraduate students (Math 215, in my case) and was able to offer clear examples, straightforward solutions, a great understanding of the theory behind the equations, and an engaging sense of humor for the entirety of the semester."

It's been said that a leader's work is not measured by his own success, but by how he increases the success of the led. While Gavin's work has certainly been successful by any measure, his leadership in the professional development of his students, Project NExT Fellows, and many colleagues has resulted in innumerable successes for others, and indeed for mathematics at large. The Michigan Section is delighted to join the MAA in celebrating Gavin's outstanding work over many years.

You can read other articles about Gavin and his work at http://bit.ly/1fo6Edf and http://bit.ly/1fo6NgJ.

Matt Boelkins (GVSU)

MMPC Honors Top Students

A total of 100 Michigan high school students, from 31 different schools, were honored for their achievement in the 57th Annual Michigan Mathematics Prize Competition at the Awards Day program held on Saturday, March 1, 2014, at Hope College. This was the final year of the three-year term of Director **Stephanie Edwards** (Hope C). The new directors are **Kim Rescorla** (EMU) and **Carla Tayeh** (EMU).

Michele Intermont (Kalamazoo C) spoke on "Plain Bob and the Tower of Algebra", and there was a poster session on "Great Things You Can Do with a Strong Mathematics Background". The award winners are:

Name	School	Award
Jackie Bredenberg	Detroit Country Day School	Gold, 1st Place
Dhruv Medarametla	Troy High School	Gold, 2nd Place
Daniel Gershenson	Houghton High School	Gold, 3rd Place
Alan Xu	Ann Arbor Huron High School	Silver, 1st Level
Eric Ryu	Detroit Country Day School	Silver, 1st Level
Heesu Hwang	Ann Arbor Huron High School	Silver, 2nd Level
Zachary Obsniuk	Livonia Math./Sci./Comp. Prog.	Silver, 2nd Level
Arkadiy Frasinich	International Academy	Silver, 3rd Level
Raj Raina	Novi High School	Silver, 3rd Level
Brian Xu	Detroit Country Day School	Silver, 3rd Level

In addition, 40 Bronze Awards were given and 50 students received Honorable Mention. The top 50 students received $20,000 in scholarships in amounts ranging from $250 to $2,500. The Honorable Mention winners received copies of the book *Martin Gardner in the Twenty-First Century*.

Part I of the MMPC is a 40-question multiple-choice test, which this year was administered on October 1, 2013. The top 1207 participants from Part I were invited to take Part II on December 11, 2013.

Of the top 100 students, there were 11 females and 89 males. A special note: This is only the second time in history that the Gold Award First Place was to a female! Congratulations to **Jackie Bredenberg**. (The other time was **Linda Chen** in the 35th MMPC.)

A special thank you goes out to **Mark Bollman** from Albion College, who hosted Grading Day. Mark your calendars for next year's Grading Day: January 17, 2015, at Albion College. And thank you to the graders that made Grading Day so fun and productive! We couldn't have done it without you all! Also—thank you to the Hope College Department of Mathematics and the Division of Natural and Applied Sciences, and to Mu Alpha Theta for providing the Amazon gift cards and three copies of Mathematica that were given away through a raffle at the Awards Day banquet.

The official website of the MMPC (math.hope.edu/mmpc) contains information about the competition. "Like" us on Facebook!

Stephanie Edwards (Hope C)

MMPC Top 100 Statistics

- The top Gold Award winner, **Jackie Bredenberg**, is a junior. The second-place Gold Award winner, **Dhruv Medarametla**, is a sophomore. The third-place Gold Award winner, **Daniel Gershenson**, is a junior. Note: Dhruv and Daniel were second and third places respectively last year too.
- Of the 7 Silver Award winners, 6 are seniors and 1 is a sophomore.
- **Jackie Bredenberg** was the top female winner (and the second ever female top Gold Award winner).

Top MMPC Results for Each Grade

Grade	12	11	10	9	8	7
Place	4	1	2	14	19	11
Score	88.6	98	97.6	77.6	74	79.4

Top 100 Results by Grade

Grade	Total	12	11	10	9	8	7
# in Top 100	94	35	19	23	7	7	3

(6 students did not report their grade level)

Top 100 Results by Gender

	Total	M	F
Scholarships	51	45	6
Honorable Mention	49	44	5
Total	100	89	11

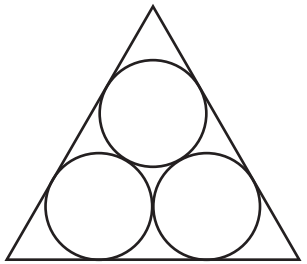
- A student's score is the sum of the Part I score (out of 40) plus 1.2 times the Part II score (out of 50).
- The cutoff score to qualify for Part II this year was 17 (out of 40).
- The cutoff score to make the top 50 of the competition this year was 62.8.

57th MMPC Part II Problems

The top 1000 students had 100 minutes to solve these five problems.

1. The number 100 is written as a sum of distinct positive integers. Determine, with proof, the maximum number of terms that can occur in the sum.

2. Inside an equilateral triangle of side length s are three mutually tangent circles of radius 1, each one of which is also tangent to two sides of the triangle, as depicted below. Find s.



3. Color a 4×7 rectangle so that each of its 28 unit squares is either red or green. Show that no matter how this is done, there will be two columns and two rows, so that the four squares occurring at the intersection of a selected row with a selected column all have the same color.

4. (a) Show that the y-intercept of the line through any two distinct points of the graph of $f(x) = x^2$ is -1 times the product of the x-coordinates of the two points.

   (b) Find all real valued functions with the property that the y-intercept of the line through any two distinct points of its graph is -1 times the product of the x-coordinates. Prove that you have found all such functions and that all functions you have found have this property.

5. Let n be a positive integer. We consider sets $A \subseteq \{1, 2, \ldots, n\}$ with the property that the equation $x + y = z$ has no solution with $x \in A$, $y \in A$, $z \in A$.

   (a) Show that there is a set A as described above that contains $[(n+1)/2]$ members where $[x]$ denotes the largest integer less than or equal to x.

   (b) Show that if A has the property described above, then the number of members of A is less than or equal to $[(n+1)/2]$.

MMPC Awards Day, Hope College, March 1, 2014

Gold and Silver Award winners, from left, Dhruv Medarametla, Jackie Bredenberg, and Zachary Obsniuk

Ruth Favro, on behalf of the Association for Women in Mathematics, honoring Jackie Bredenberg with the award for top female winner

Graves Hall, Hope's third-oldest building and the site of the keynote address

MMPC Director Stephanie Edwards with Mark Bollman and two Hope students at the registration table

Michele Intermont delivering the keynote address, "Plain Bob and the Tower of Algebra"

Gold, Silver, and Bronze Award winners

Stephanie Edwards with incoming MMPC Director Kim Rescorla

Michigan Section Chair Steve Blair presenting Dhruv Medarametla with the Second Place Gold Award

Seventh grader Freddie Zhao, who finished in eleventh place, receiving a Bronze Award

Dave Friday encouraging students to join the ARML Michigan All-Stars team

Students having a good time with their families and friends before the awards ceremony

Contest News

The American Mathematics Contest 8 (AMC 8), for students in grades 8 and below, is a 25-question, 40-minute multiple-choice examination in middle school mathematics designed to promote the development and enhancement of problem solving skills, to demonstrate the broad range of topics available for the junior high school mathematics curriculum, and to promote excitement, enthusiasm, and positive attitudes towards mathematics.

The 2013 AMC 8 exam was taken by 150,227 students from 2,422 schools, with an average score of 10.69 out of 25 total points. The top 1% scored 22 or above. In Michigan, 3,306 students from 41 schools took the exam.

Eleven students (up from five last year) in Michigan got a perfect score of 25: 8th graders **Arushi Arora**, **Aneesh Cherukuri**, **Raviraj Rege**, and **Robert Xu** of Novi MS (Novi), 8th graders **Heather Gu**, **James Li**, and **MuYang Wang** and 7th graders **Shivani Konduru** and **Freddie Zhao** of Boulan Park MS (Troy), 6th grader **Srihara Ganesh** of LTU (Southfield), and 7th grader **Jason Hu** of AAMOC (Ann Arbor). There was a tie for team winner between Novi MS and Boulan Park MS; both schools had a perfect score of 75 out of 75.

Seven students (down from eleven last year) in Michigan got a score of 24: 8th grader **Venkatesh Bajji** of Boulan Park MS (Troy), 8th graders **Megene Chu** and **Brian Hu** of Detroit Country Day MS (Beverly Hills), 8th grader **Justin Lee** of Clague MS (Ann Arbor), 8th grader **Krithik Vallem** and 7th grader **Timothy Wu** of Meads MS (Northville), and **Ashwin Vangipuram** of Novi MS (Novi).

Results from the AMC 10/12 A and the AMC 10/12 B are still pending.

Since taking over as AMC coordinator last semester, I arranged our first awards ceremony, hosted by Macomb Community College. Professor **Michael Dabkowski** (UM-AA) delivered the keynote speech on the subject of "Mathematical Spirals". Dinner was provided by the University Center of Macomb Community College. Also in attendance were **Ruth Favro** (LTU) and **Raghunath Khetan** (ICAE) to help honor the winners. It is my sincere hope to see as many winners as possible this fall at our next ceremony.

Congratulations once more to all of the 2013 AMC 8 winners!

Dave Friday (Macomb CC)

Michigan NExT

The Michigan Section Project NExT got off to a good start at the Section meeting last May with two sessions—one a panel discussion on effective teaching and the other a town hall session on the future of Project NExT. I appreciate all who contributed to the latter discussion. I want to thank **Theron Hitchman** of the University of Northern Iowa and **Dana Ernst** of Northern Arizona University for being our guest panelists. At this year's Section meeting, we are planning a Project NExT session (topic TBA) as well as a social event for NExT fellows and their mentors for Friday night.

Earlier this year, we welcomed four new fellows into the sectional Project NExT: **William Abram** (Hillsdale C), **Dave Gaebler** (Hillsdale C), **Daniel Sievewright** (Kalamazoo C), and **Yunus Zeytuncu** (UM-Dearborn).

If you have any questions about the program or any suggestions, please feel free to contact me.

Robert Talbert (GVSU)

New Officers to Be Elected at Annual Meeting

The annual business meeting of the Michigan Section–MAA will take place on Friday, May 2, 2014, at UM-Flint during the Annual Meeting. One of the major items of business is the election of officers. The Nominating Committee, chaired by **Dan Isaksen** (WSU), will propose a slate of candidates. **Michele Intermont** (Kalamazoo C) will be nominated for Chair, **Brian Snyder** (LSSU) will be nominated for Four-Year College Vice Chair, and **Jan Roy** (Montcalm 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.

The Nominating Committee is listed on page 35.

Dan Isaksen (WSU)

Save the Date for the U.P. Meeting

The dates of the 2014 Upper Peninsula Regional Mathematics Meeting have been set for October 3 and 4, 2014. The meeting will be hosted by Northern Michigan University. The program will consist of several hour-long plenary talks and some 20-minute contributed talks.

It is expected that the plenary speakers will be **Tim Pennings**, **Roger Nelsen**, and a representative of the Michigan Section–MAA. Pennings, formerly of Hope College and now of Davenport College in Grand Rapids, will speak on how dogs appear to know calculus, based upon his experience with his late dog, Elvis. Nelsen, of Lewis and Clark College in Portland, Oregon, who is perhaps best known for his proofs without words in *Mathematics Magazine*, will speak on visual number theory. The representative of the Michigan Section is yet to be identified.

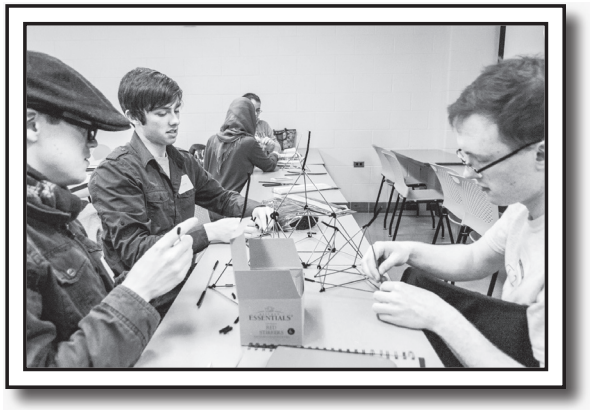
If you want to give a contributed talk, send a title and abstract of at most 100 words by email to **John Kiltinen** (kiltinen@nmu.edu).

Kiltinen said, "If Mother Nature smiles on us, the fall colors will be spectacular then, so the long drive to Marquette will be half the fun."

John Kiltinen (NMU)

Michigan Undergraduate Mathematics Conference

The 16th annual Michigan Undergraduate Mathematics Conference (MUMC) took place on the campus of Eastern Michigan University on Saturday, March 8, 2014. The keynote speaker was **Victoria Booth** of UM-Ann Arbor, along with her undergraduate research student **Rebecca Gleit**, who did her part of the presentation via Skype from Wisconsin, where she is doing Teach for America. Their topic was a differential equation model linking sleep-wake cycles and circadian rhythms and showing how they can become asynchronous. As we know, sleep-wake cycles are a topic that every undergraduate understands at an intuitive level.



Students using pipe cleaners and coffee stirrers to construct polyhedra

The event was attended by over 50 undergraduates, nine graduate students, and 17 faculty members, from 17 different schools. There were eight student presentations, including two posters. Two of the talks were on math education, three were more statistical/probabilistic, and one was on ballistics. The conference program, including abstracts, can be seen at the conference website: http://bit.ly/mumc2014.

The past few conferences have had a contest as their activity, and that continued this year with a math trivia game, "2π Radians of Fortune". We also had a collaborative/creative activity, using pipe cleaners and straws (actually coffee stirrers) to build polyhedra. Two that stick in my mind were the four-dimensional simplex (or at least an approximation of it) and a nested dodecahedron/icosahedron. We also had a panel on graduate school in the mathematical sciences, with presentations from Wayne State's MPH/biostatistics program and CMU's PhD program, and reflections on graduate school from **Andrew Wilfong** (EMU).

The event concluded with two rounds of the Smallest Unique Positive Integer contest. Each player writes their name and a positive integer on a slip of paper without showing it to anybody, and submits it to the coordinator. The results are then tallied at the front of the room, and the winner is the person who chose the lowest positive integer that nobody else chose. For example, if the submissions were 5, 3, 7, 5, 2, 7, 2, and 11 then the winner would be the person who submitted the 3, since the 2 was repeated. After the participants saw all of the first-round entries, we did a second round, where people could use what they learned on the first round if they liked. This can also be used as a fundraiser, where each submission costs $1 or so, and a person may submit multiple entries.

We are grateful to the faculty who encouraged their students to present and/or attend. Please consider this conference as you are supervising student work in the Summer (REUs?), Fall, and Winter/Spring semesters. Presentations do not have to be cutting-edge research—the purpose of the conference is to help students become familiar with the mathematical community in a welcoming environment.

The location and timing of next year's MUMC is still being discussed. One possibility that has been brought up is merging it with the annual Section meeting (for example, having the MUMC on a Friday and the Section meeting on that Saturday). Please discuss it with your colleagues and with the Michigan MAA leadership. Funding for MUMC 2014 was provided by the EMU Department of Mathematics, the EMU College of Arts and Sciences, and NSF grant DMS-0846477 through the MAA Regional Undergraduate Mathematics Conferences program: maa.org/RUMC.

Andrew Ross (EMU)

MAA Department Liaisons

Your departmental liaison helps keep you informed about what's happening in our Section by passing along announcements of upcoming events. If you are not receiving these announcements, please contact the Liaison Coordinator, **David Austin** (austind@gvsu.edu). If your department does not have a liaison, we would love to have you join us. It's an easy job, and your colleagues will appreciate your efforts. Just contact David Austin to volunteer.

David Austin (GVSU)

Distinguished Teaching Award

The Distinguished Teaching Award committee—**Andrew Ross** (EMU), **Gavin LaRose** (UM-AA), **Matt Boelkins** (GVSU), and **Katie Ballentine** (Mathematical Reviews)—is pleased to announce that the 2014 recipient of this award is **Ken Schilling** (UM-Flint).

Nominations for the 2014 award will be accepted beginning in the fall. Completed nominations must be received by November 1, 2014, to be considered for the 2015 award. A complete description of the process can be found at the Michigan Section website at sections.maa.org/michigan/awards.html. The person that the committee selects will receive the Michigan Section Award for Distinguished College of University Teaching of Mathematics at the Annual Meeting of the Michigan Section–MAA.

The national MAA is discussing new guidelines for DTA committee membership and nominations for the Deborah and Franklin Tepper Haimo Award for Distinguished College or University Teaching of Mathematics. Those who are interested should contact Andrew Ross (EMU) for more information.

Every math department has someone who deserves nomination. Nomination might be a good way to support a colleague who is going up for tenure or promotion, as long as he or she has at least seven years' experience in teaching the mathematical sciences and is a member of the MAA. Nominations from two-year colleges are just as welcome as those from four-year colleges or universities. Non-tenure-track faculty members are eligible. Women and minority nominations are encouraged.

Andrew Ross (EMU)

Distinguished Service Award

Past Chair **Dan Isaksen** (WSU) is delighted to report that **John Fink** of Kalamazoo College has been selected to receive the Section's 2013–2014 Distinguished Service Award. Details will appear in the Fall 2014 *Newsletter*, and John will be recognized at the awards banquet at UM-Flint on Friday, May 2, 2014.

Dan Isaksen (WSU)

News from the Campuses

Albion College

reported by Mark Bollman • mbollman@albion.edu

Mark Bollman has returned as department chair, replacing **Paul Anderson**. Recent visitors to the department include **Marion Weedermann** (Dominican U), **William Green** (Albion '05, Rose-Hulman Institute of Technology, and a winner of Albion's 2014 Young Alumni Award), and **Catherine Crawford** (Elmhurst C). Once again, the Math/CS Department at Albion encourages people from around the world, and our Section colleagues in particular, to show their support for mathematics by wearing plaid on International Plaid Day: April 25, the last Friday of Mathematics Awareness Month.

Alpena Community College

reported by Dan Rothe • rothed@alpenacc.edu

We are happy to be back for the winter semester at Alpena Community College. Those below zero temperatures are a "cool" example for teaching negative numbers in elementary algebra! Like most community colleges in Michigan, we continue to face decreases in enrollment. Our dual enrollment classes remain strong including Calculus II in Alpena and Precalc in Rogers City. **Kristin Berles** continues to teach a section of intermediate algebra online. Instructor **Jim Berles** is putting his knowledge from last year's sabbatical to work teaching a new GIS class.

Calvin College

reported by John Ferdinands • ferd@calvin.edu

Earl Fife is retiring after 26 years of service to the Mathematics Department. Earl has served as the Webmaster and Public Information Officer of the Michigan Section–MAA. **Chris Moseley** has been awarded tenure at Calvin College. **Jan Koop** has been awarded an Improving Teacher Quality Grant of $232,609 for 2013–2014 by the Michigan Department of Education. This involves monthly meetings with teachers, teacher mentoring, and five-day institutes in the summers.

Central Michigan University

reported by Susan Cooper • s.cooper@cmich.edu

S.R. Srinivasa Varadhan gave the 3rd Fleming Lecture at CMU on March 27 and 28, 2014. See cmich.edu/colleges/cst/math/Pages/Fleming-Lecture-Series.aspx for details. The department's colloquium schedule can be found at people.cst.cmich.edu/coope2sm/colloquia.html.

Davenport University

Tim Pennings • tpennings@davenport.edu

Davenport University recently announced plans to develop a College of Urban Education, which will focus on addressing the needs of K–12 schools serving inner-city students. Beginning with a master's program, the plan is to develop undergraduate education programs in mathematics, science, and English. • In early August, *USA Today* carried the news that Elvis, the Welsh corgi who knew calculus, died at the age of 13. For 10 years Elvis traveled the country promoting mathematics, giving almost 200 talks with his friend and co-author **Tim Pennings**. Because of continuing requests to hear about Elvis, and with heretofore unseen video footage of Elvis using calculus to retrieve sticks thrown into Lake Michigan, Pennings is available for colloquia with "The Spirit of Elvis Is Alive and Is in the Building". • DU has two retirements this year: **Ray Grohowski**, who taught for DU for 10 years mainly at the Holland campus after a career in industry, will retire in 2014. Still active and engaged in mathematical pursuits, he reports, "I have an entire shelf of math books that I want to read." Music (composing and trumpet), 3D printing, and creating smartphone apps are high on the list as well. **Roger Brown** is retiring after 26 years of teaching and serving as associate chair for the Holland, Kalamazoo, and Battle Creek campuses and a short stint as interim department chair. Roger, who has had a "second career" as a Little League umpire, is looking forward to spending more time with his two grandsons and his family.

Delta College

reported by Frances Lichtman • franceslichtman@delta.edu

Jim Ham was reelected to the AMATYC executive board as Midwest Vice President. **Natascha Rivet** is a state delegate representing Michigan at the AMATYC Delegate Assembly. The Mathematics Division thanks **Robert Talbert** of Grand Valley State University for presenting a professional development seminar on flipping the classroom in February.

Grand Valley State University

reported by Paul Fishback • fishbacp@gvsu.edu

Cathy Gardner, **Jiyeon Suh**, and **Will Dickinson** are on sabbatical this term. **Paul Fishback** has returned from a Fall 2013 sabbatical. **Ted Sundstrom**, **Cathy Gardner**, **Char Beckmann**, and **Karen Novotny** were honored at the recent GVSU Faculty Awards Convocation for their 40, 30, 25, and 25 years of service, respectively. **Matt Boelkins** was the keynote speaker at the event and received the GVSU Outstanding Advising and Student Services Award. Paul Fishback will become president-elect of the Pi Mu Epsilon National Honorary Mathematics Society in July.

Hillsdale College

reported by David Murphy • dmurphy@hillsdale.edu

Ryan Hutchinson is on sabbatical this semester. **Jack Reinoehl** will retire at the end of this term after 32 years with our department, during which time he has served as department chair and as liaison to the Michigan Section–MAA.

Hope College

reported by Todd Swanson • swansont@hope.edu

Stephanie Edwards, MMPC director, and Hope College hosted the Michigan Mathematics Prize Competition Awards Day on March 1 (see math.hope.edu/mmpc/ for details). Stephanie Edwards is on sabbatical for the semester. **Will Dickinson** is a visiting faculty member at Hope College for the year while he is on sabbatical from GVSU. **Jill VanderStoep** and **Todd Swanson** received an NSF grant to conduct workshops and develop an online community for curricula that use simulation-based methods to introduce statistical inference as well as to assess such programs.

Lawrence Technological University

reported by Mike Merscher • mmerscher@ltu.edu

Robofest 2014, led by **CJ Chung** and **Chris Cartwright**, will hold its World Championship at LTU on May 17. The 44th Annual LTU High School Math Competition, authored by **Mike Merscher**, will be on April 27. **Sonia Henckel** has retired after many years of extraordinary teaching; we will miss her greatly. The LTU Math Club fielded three teams of three students each in the 2014 Mathematical Contest in Modeling. LTU will host the 2014 Lower Michigan Mathematics Competition on April 5.

Mathematical Reviews

reported by Michael A. Jones • maj@ams.org

Associate Editor **Tadeusz Józefiak** is on study leave until July. Executive Editor **Graeme Fairweather** will retire at the end of May. **Michael A. Jones** was appointed editor-elect of *Mathematics Magazine*. In January, Math Reviews celebrated the 3,000,000th item being added to the MathSciNet database.

Saginaw Valley State University

reported by Emmanuel Ncheuguim • ekengnin@svsu.edu

Simplice Tchamna, of Georgia College State University, will give a talk on Tuesday, April 8, titled "A Noetherian Local Domain Whose Ideal Completion Is Not Noetherian". He will be hosted by **Olivier Heubo-Kwegna**.

Schoolcraft College

reported by Randy Schwartz • rschwart@schoolcraft.edu

Larry Choraszewski and **Paula Schmansky** were hired as new full-time instructors, effective September 2013. **Janet Arsznov** retired in December 2013 after a 25-year career at Schoolcraft. On November 15, 2013, **Ed Moylan**, Infrastructure Support Manager, Ford Motor Co. (retired), and Secretary, Great Lakes Chapter, Society for Industrial and Applied Mathematics, presented "A Mathematics Education: What Are the Job Opportunities?", hosted by the Math and Physics Club. **Randy Schwartz** was appointed to the editorial board for the MAA journal *Convergence: Where Mathematics, History, and Teaching Interact*. This free online journal invites submissions; contact Randy or see maa.org/publications/periodicals/convergence.

Wayne State University

reported by Daniel Drucker • drucker@math.wayne.edu

David Gluck retired at the end of the Fall 2013 semester. **Victoria Booth** of the University of Michigan was a Visiting Scholar in late January 2014 and attracted a diverse and appreciative audience to her talks. **Sandra Robinson** was awarded a College of Liberal Arts & Sciences Teaching Award. WSU hosted the Midwest Topology Seminar in Fall 2013 (clasweb.clas.wayne.edu/2013/10/31/Wayne-State-hosts-Midwest-Topology-Seminar/News/2254). WSU will host the Finite Element Circus March 28–29, 2014 (math.wayne.edu/~hli/conferences/FEC2014).

Non-integer birthdays

Most people celebrate integer year birthdays, and some people celebrate a child's π or e birthday, but why stop there? In my family, we celebrate many other birthdays related to common mathematical constants: log(2), $1/e$, and the Euler-Mascheroni gamma constant are just the start. You can compute these using Wolfram Alpha. For example, a query of April 30, 1777 + $1/e$ years yields Gauss's $1/e$ (approximately 0.36788) birthday: September 11, 1777. The same computation can be done in a spreadsheet, where it is easy to compute a whole batch of such birthdays at once. My collection of common constant birthdays is at http://bit.ly/noninteger-birthday.

Andrew Ross (EMU)

Student Chapter News

Alpena Community College

Sigma Zeta Math/Science Honor Society continues to be active. The members provided coat check and valet parking at the Military Ball held at the Alpena Combat Readiness Training Center (Phelps Collins Air National Guard Base). In December, they toured the National Superconducting Cyclotron Lab at MSU as well as visiting the state capital and the art museum. Despite the cold weather, we stopped at the MSU Dairy store for ice-cream and cheese! We look forward to helping with the Regional Science Olympiad in March, and plans for a spring trip are under way.

Central Michigan University

Kappu Mu Epsilon: E-Board: President—**Jessica Willson**, Vice President—**Leah Mays**, Secretary—**Brady Tyburski**, Treasurer—**Jocelyn Faydenko**. In Spring 2014, Dr. **Ben Salisbury** (CMU) will give a talk. The DVD show "The Great π/e Debate" and the initiation ceremony will occur in April. KME will organize a Math-a-Palooza event where members help students to prepare for their final exams. Members plan to attend MUMC in March and the KME National Convention in Alabama in April. Faculty advisors: Dr. **Sivaram Narayan** and Dr. **Meera Mainkar**. • Gamma Iota Sigma: Officers for next year: Co-President—**Christina Dork**, Co-President—**Lauren Lafountain**, Secretary—**Jared Leach**, Treasurer—**Sarah Mok**, Philanthropy/Fundraising—**Devan Walworth**, Communications—**Nicole Feinauer**, Public Relations—**Blake Ryan**, SGA Rep—**Molly McNees**. Gamma Iota Sigma started a GIS Week of Service that was February 1–8, and our chapter volunteered at CMU Sibs Weekend. We made the national GIS newsletter in January for a community service event we did in November. For this event, we paired up with the Isabella County Commission on Aging and raked senior citizens' yards on weekends. Faculty advisors: Dr. **Kahadawala Cooray** and Dr. **John Daniels**.

Schoolcraft College

The Schoolcraft College Student Math Team had its best showing ever in 2012–2013, finishing in 3rd place among the nearly 200 community colleges in the US and Bermuda competing in the annual two-round AMATYC Student Math League Contest. Team member **Rohit Bhadange**, with a score of 62.5 out of 80, tied for 6th place among the thousands of contestants. At Schoolcraft, the activity is organized by the Math and Physics Club and its faculty advisor, **Mike McCoy**. Club President this Winter is **Michael Mroczka**.

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 (ams.org/eims). See also mathclassifieds.org and mathjobs.org.

Davenport University is accepting applications for a full-time faculty position at our newly renovated Lansing campus in downtown Lansing a block from the state capitol. A PhD in mathematics, applied mathematics, or statistics is expected. Please visit davenport.edu/human-resources/applicant-resources or contact Tim Pennings at tpennings@davenport.edu or 616-554-4715.

Lansing Community College is searching to fill a full-time Assistant Professor of Mathematics position in Fall 2014. Details can be found at jobs.lcc.edu/postings/1594.

Mathematical Reviews (eims.ams.org/jobs#/detail/5951766) invites applications for a full-time position as an Associate Editor. A competitive applicant should have expertise in one or more of the following areas: algebra, geometry, number theory, topology.

Committees and Appointments

Michigan Section
Mathematical Association of America

Contact Information

Executive Committee

Chair	Steve Blair ('14)	EMU	sblair6@emich.edu	734-487-1296
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2014 Michigan Undergraduate Mathematics Conference

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Organizing Committee:
2014 Upper Peninsula Regional Mathematics Meeting

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sections.maa.org/michigan

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Join the MAA Community

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