Mathematical Association of America History of Mathematics Special Interest Group

HOM SIGMAA News

Volume XIII, Number 2

September 2023

Inside this issue:

Greetings from the HOM SIGMAA Chair

This past spring, we continued our HOM SIGMAA Virtual Speaker Series presentations with an excellent talk by Colm Mulcahy, Professor Emeritus at Spelman College, on "The Annals of Irish Mathematics: Trying to Track Four Centuries of Mathematical Activity". We had a great attendance for his talk, that was a great blend of historical and future thinking.

Danny Otero, Dan Curtin, Ximena Catepillán and Bud Boman at MathFest

If you have any suggestions for speakers for our Virtual Speaker Series, please contact Jemma Lorenat, the HOM SIGMAA Program Coordinator. Our Electronic Resources Coordinator, Antonia Cardwell, is soliciting History of Mathematics Course Outlines and library resources for the HOM SIGMAA page.

At MathFest 2023 in Tampa, FL, August 2-5, HOM SIGMAA had numerous events including talks, sessions, workshops, prizes and awards, panels, readings, a business meeting, and a trivia contest. You can find a detailed listing here.

Some pictures at HOM SIGMAA events at MathFest 2023 are below and on the next page.

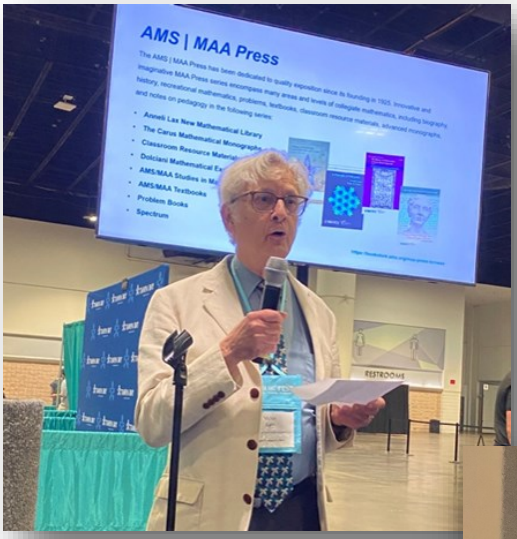
The HOM SIGMAA officers have submitted an article to FOCUS to be published in the Spotlight on SIGMAAs section.

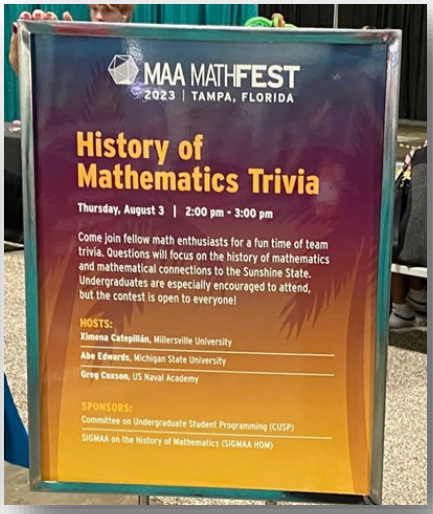
We are excited for the start of the Al-Khwarizmi Student Paper Contest this fall. See the flyer later in this newsletter for more information.

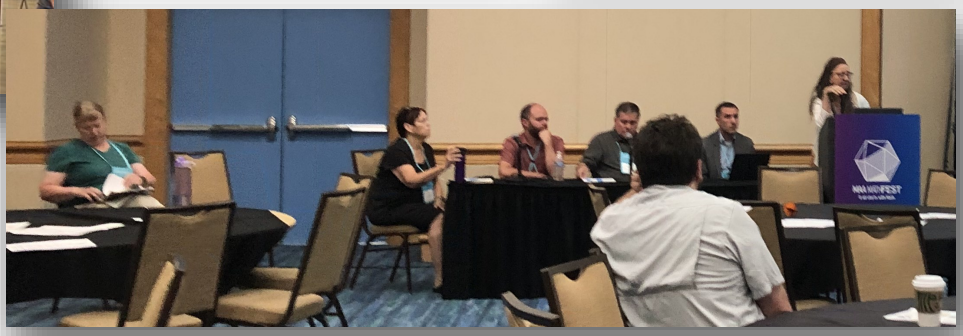
Lastly, HOM elections are not far away, including Secretary/Treasurer and Program Coordinator. Please consider joining the HOM SIGMAA governance team, we are constantly looking for people to be involved. The deadline for submitting nominations information is September 25. For submissions, please contact me or our past chair, Amy Shell-Gellasch.

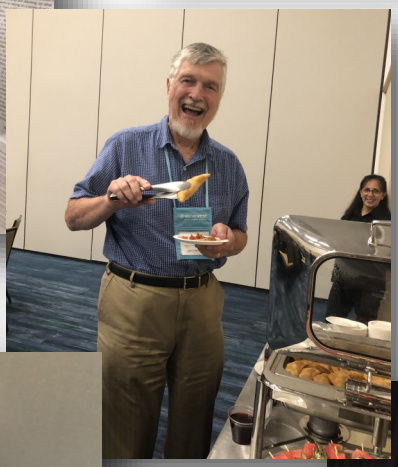
Best regards from Ximena

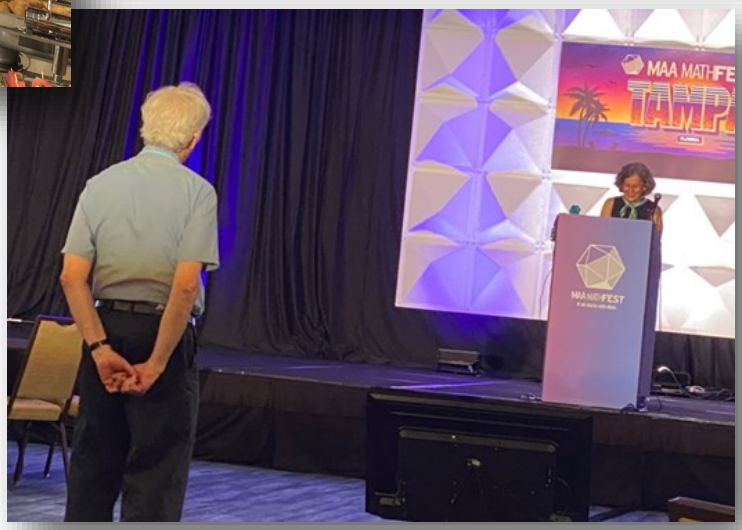
More pictures from MathFest 2023



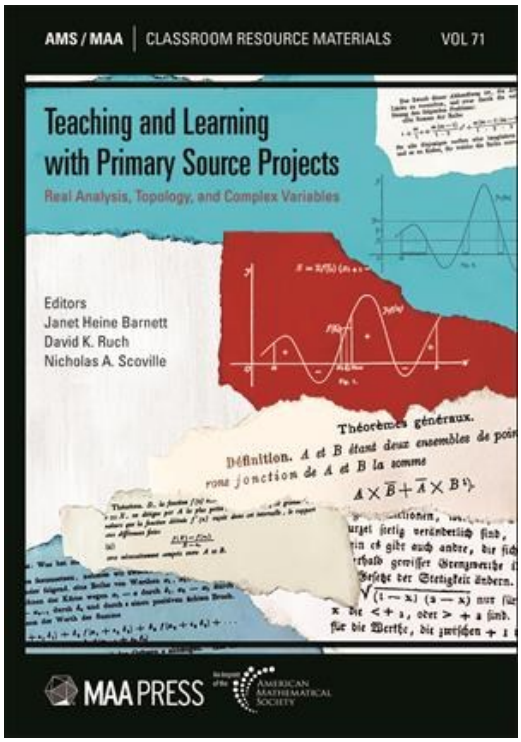




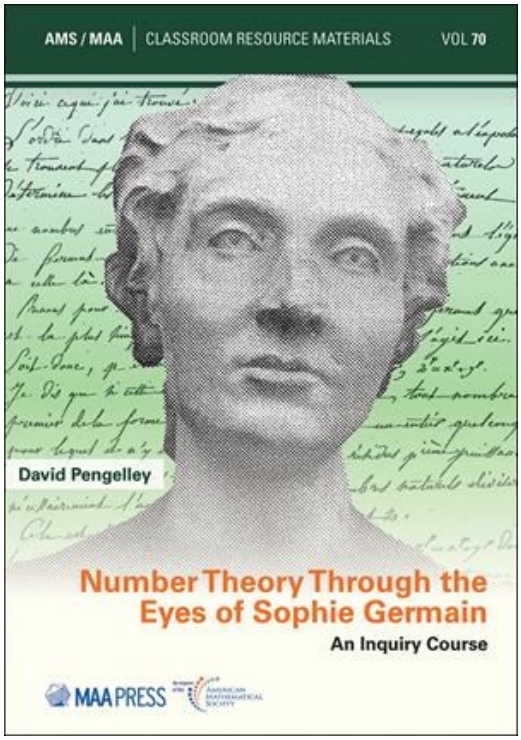




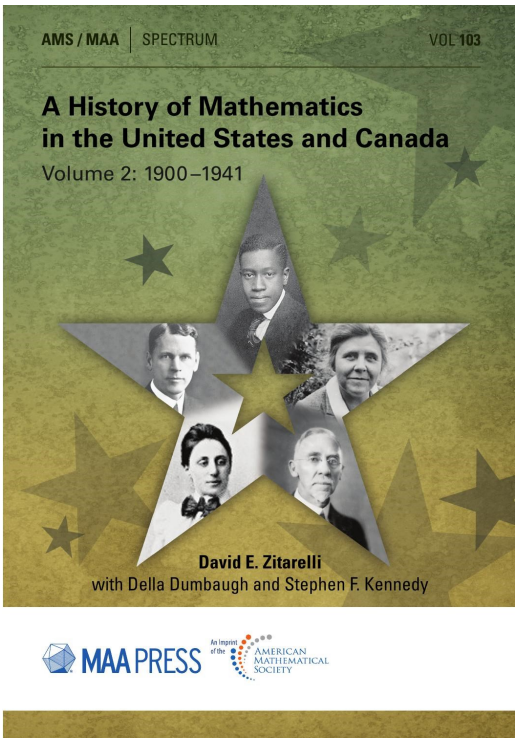
NEW HOM BOOKS IN MAA PRESS



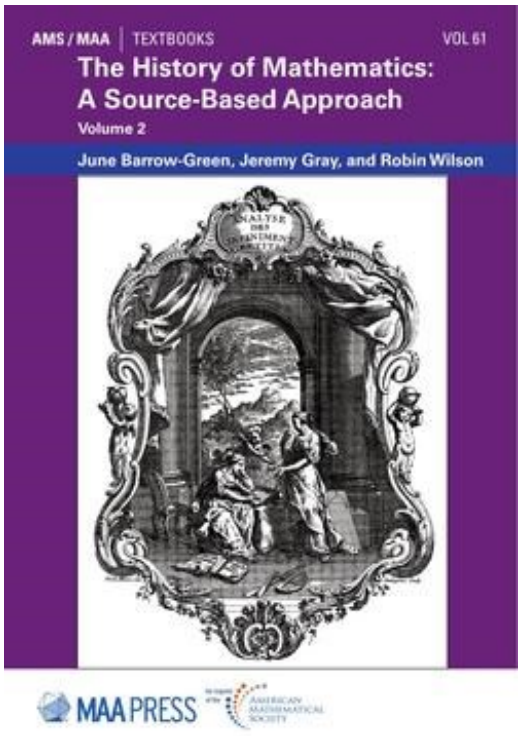
[Teaching and Learning with Primary Source Projects: Real Analysis, Topology, and Compex Variables]



[Number Theory Through the Eyes of Sophie Germain]



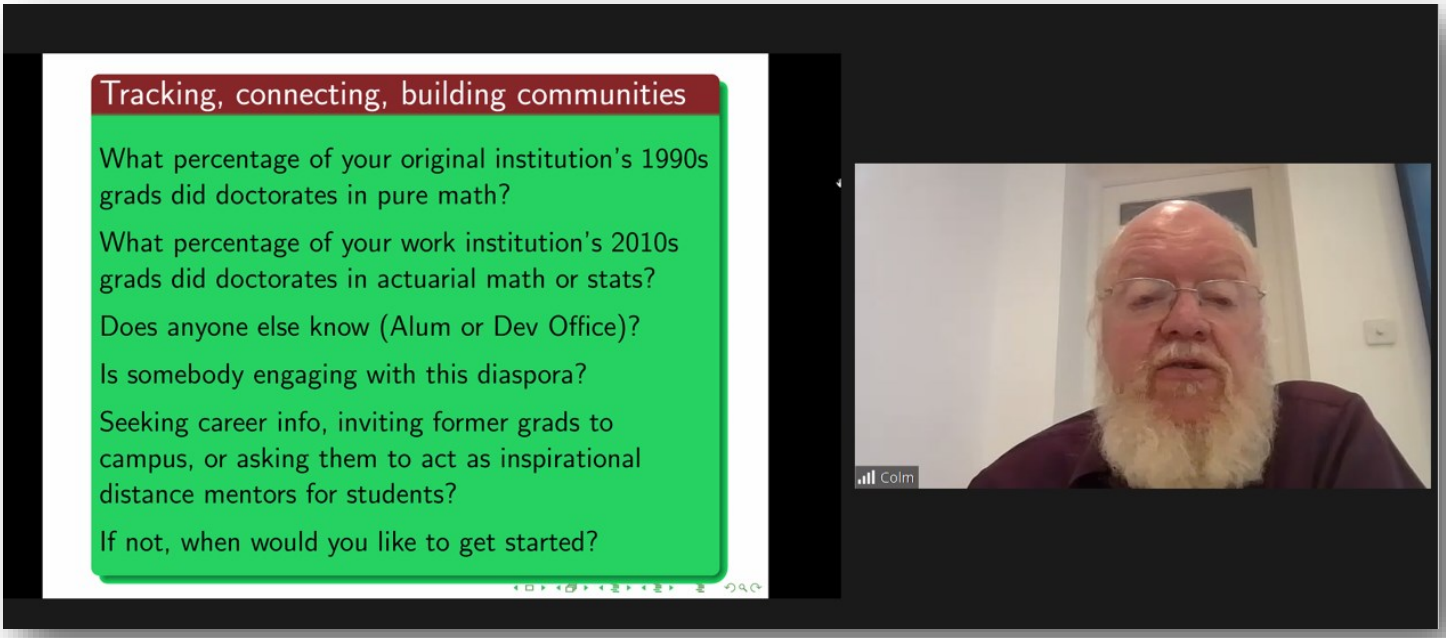
[A History of Mathematics in the United States and Canada, Vol. 2]



[The History of Mathematics: A Source-Based Approach, Vol. 2]

HOM SIGMAA VIRTUAL SPEAKER SERIES

HOM SIGMAA continued its speaker series organized by Jemma Lorenat, HOM SIGMAA Program Coordinator, with Colm Mulcahy, The Annals of Irish Mathematics: Trying to Track Four Centuries of Mathematical Activity, June 2. Watch MAA Connect for information on upcoming talks this fall!



HOM SIGMAA Elections

Every fall the members of HOM SIGMAA elect at least one new member to our Executive Board. Each of these executives – Chair, Secretary/Treasurer, Program Coordinator and Electronic Resources Coordinator – serve a three-year term, appropriately staggered so as to preserve continuity of governance. We need to elect a Secretary/Treasurer and a Program Coordinator this fall, as their terms are set to expire at the conclusion of 2023. Elections will take place in October and will be administered by MAA staff as has happened in recent years.

The Secretary/Treasurer keeps records of official meetings of the HOM SIGMAA and its Executive Committee and disburses funds as directed by the HOM SIGMAA Executive Committee. Other duties include keeping a record of the affairs of HOM SIGMAA, communicating important information about the SIGMAA to its members through a regular Newsletter, and preparing the SIGMAA annual report for submission to the MAA.

The Program Coordinator solicits proposals for special sessions at MathFest, and for other workshops, conferences, etc., from the HOM SIGMAA membership, and coordinates with the MAA Associate Secretary to plan these programs. Other duties include scheduling the annual meeting and making arrangements for the reception and invited speaker.

Please contact Past-Chair Amy Shell-Gellasch, ashellge@emich.edu, with names of candidates you think would be ideal to stand for election to these posts by September 25. Self-nominations are also welcome.

Eulerian Scholar Remembered with Conference

The History of Mathematics Community remembered Eulerian Scholar Dr. Ed Sandifer with a virtual conference on February 17-18, 2023. *How Ed Did It: A Celebration of the Legacy of Historian of Mathematics Ed Sandifer* was organized by Amy Shell-Gellasch and Larry D'Antonio. Speakers included Robert Bradley, Richard Cleary, Lawrence D'Antonio, Stacy Langton, Dominic Klyve, Erik Tou, Bill Dunham, M.W. Alexander, V. Frederick Rickey, Niccolò Guicciardini, Kim Plofker, Craig Fraser, Chuck Rocca, and Jordan Bell.

Ed Sandifer (Dec. 6, 1951 - August 31, 2022) was a treasured member of the history of mathematics community. His undergraduate degree was from Dartmouth and his Ph.D. from the University of Massachusetts, Amherst. He taught at Western Connecticut State University from 1986 until suffering a stroke in 2009. Ed's primary area of research was the study of the mathematics of Leonhard Euler. At the 2001 JMM in New Orleans, he helped draw up plans for the Euler Society, with Ed being named as the Society's Secretary. His research on Euler became widely known through his monthly online MAA column, *How Euler Did It*. Each column would look at a particular paper of Euler's and explain Euler's methodology. To celebrate the tercentenary of Euler's birth, the MAA published several volumes that Ed wrote or helped edit. Other Euler volumes would follow and showing his versatility, Ed collaborated on translations of works of Cauchy and L'Hôpital. No discussion of Ed is complete without mentioning his love of running. Along with many other races, he ran the Boston Marathon for 37 years in a row. Ed is survived by his wife Theresa and his daughters, Elizabeth and Victoria.

2023 HOM SIGMAA Executive Committee

Chair: Ximena Catepillán, Millersville University

Email: Ximena.Catepillan@millersville.edu

Secretary/Treasurer: Cynthia Huffman, Pittsburg State University

Email: cjhuffman@pittstate.edu

Program Coordinator: Jemma Lorenat, Pitzer College

Email: jemma_lorenat@pitzer.edu

Electronic Resources Coordinator: Antonia Cardwell, Millersville University

Email: Antonia.Cardwell@millersville.edu

Past Chair: Amy Shell-Gellasch, Eastern Michigan University

Email: ashellge@emich.edu

Victor Katz Receives Prestigious MAA Award

(Adapted from the MAA Prize Session booklet)

The Yueh-Gin Gung and Dr. Charles Y. Hu Award for Distinguished Service to Mathematics is the most prestigious award for service offered by the MAA. Victor J. Katz, Professor of Mathematics Emeritus at the University of the District of Columbia, is widely recognized as a top scholar in the history of mathematics. He was honored with the 2023 Yueh-Gin Gung and Charles Y. Hu Award for the way he leveraged his exceptional scholarship in the service of mathematics. We highlight two distinctive areas of impact: Katz's work has served a generation of teachers and students by repositioning the role of historical perspectives in mathematics education, revealing the human face of our field. It has also served the larger mathematical community by creating and organizing materials to show that mathematics is a multicultural enterprise that involves all humanity. Katz has trained a generation of mathematicians to teach our history in a rigorous, responsible, and human way. His legacy lives on in *Convergence*, a lively journal that he co-founded in 2004.

An early sign that Katz was poised to influence a generation is the reception of his text, *A History of Mathematics: An Introduction*, first published in 1992. This text, written after he had taught the history of mathematics for many years, showed the influence of his students who came from many places around the world. About to appear in its fourth edition, the book won the Watson Davis Prize of the History of Science Society in 1995. Already we see a commitment to highlighting non-Western contributions to mathematics. Perhaps the most significant of Katz's service contributions was founding the Institute for the History of Mathematics and Its Use in Teaching (IHMT) with Fred Rickey, funded by an NSF grant initially obtained in 1995. The institute produced several cohorts of teachers trained to develop their own courses on the history of mathematics. It is not too strong to say that this institute changed the way the subject is taught.

While the first rounds of IHMT focused primarily on teaching a history course, Katz's continued success winning NSF grants expanded the program to include secondary teachers and facilitated bringing historical materials into any mathematics course. Rather than corralling history into a single, separate course, this project popularized the idea of bringing historical perspectives and original sources into every course. While a strictly subject-based curriculum emphasizes depersonalized abstract structures, a curriculum enriched by historical understanding humanizes mathematics. It reminds us that mathematics is an ongoing human project where everyone's efforts are important.

In the IHMT project and in Katz's widely adopted text, non-Western perspectives on the history of mathematics play a strong role. A further sequence of sourcebooks amplified this theme: The *Mathematics of Egypt, Mesopotamia, China, India, and Islam* (Princeton University Press, 2007) and *Sourcebook in the Mathematics of Medieval Europe and North Africa* (Princeton University Press, 2017). In a time when we want to show that mathematics is not just something inherited from European thinkers, these materials are invaluable.

Evidence of the lasting impact of Katz's legacy is abundant. The health of HOM-SIGMAA, the Special Interest Group of the MAA for the History of Mathematics, shows continued enthusiasm for engaging with the history of mathematics. More significantly, the journal *Convergence*, founded by Katz with Frank Swetz, is going strong, having published its 19th volume. Katz's legacy extends far beyond U.S. shores. For all these reasons, the MAA is delighted and honored to present the Yueh-Gin Gung and Charles Y. Hu Award to Victor Katz.

Winner of the 2023 Student Writing Contest

First place in the 2023 HOM SIGMAA Student Writing Contest goes to Adin Tinsley (Stoney Brook University; Supervising Instructor: Moira Chas), for "Nicole Oresme and the Revival of Medieval Mathematics."

Adin received a one-year membership in MAA (including HOM SIGMAA) and the Canadian Society for History and Philosophy of Mathematics (CSHPM).

Copies of winning papers are available on the HOM SIGMAA website: https://homsigmaa.net/

You can also find the winning paper on Convergence: https://www.maa.org/press/periodicals/convergence/hom-sigmaa-2023-student-paper-contest-winner.

Congratulations to our winner Adin Tinsley and all students who submitted to the contest.

Thank you to Amy Shell-Gellasch for running this year's contest and to the contest judges for your service!

The flyer for this academic year's contest can be found at the end of the newsletter.

Convergence Calendar

Visit https://www.maa.org/press/periodicals/convergence/convergence-calendar for a list of events and meetings around the world which relate to the History of Mathematics.

Save these dates for future MathFests!

2024	Indianapolis, IN	August 7-10
2025	Sacramento, CA	August 6-9
2026	Boston, MA	August 5-8
2027	New Orleans, LA	August 4-7
2028	San Diego, CA	August 2-5

Small grants for the history of mathematics classroom

HOM members who need some help to purchase items for use in the teaching of the history of mathematics are encouraged to apply for a small grant. Information on how to apply can be found on our website https://homsigmaa.net/ and at the end of this newsletter.

A Plethora of Classroom Materials from Convergence

Janet Heine Barnett and Amy Ackerberg-Hastings

Editors, *MAA Convergence*

2023 has already been a busy year for Convergence, the MAA's online journal on the history of mathematics and its use in teaching and ever-expanding collection of online resources to help its readers teach mathematics using its history. Some of our newest articles and features for use in your classroom are highlighted below.

For instance, Peggy Aldrich Kidwell sets the historical context for *Geometrical Exercises in Paper Folding* (1893) and outlines several potential classroom activities for secondary and undergraduate students of geometry and preservice teachers in "Aiding the Teaching of Geometry and Affording Mathematical Recreation: Paper Folding in the Spirit of Sundara Rao of Madras." "Things Certain and Uncertain," by Michael P. Saclolo and Erik R. Tou, tells the story of a mathematical problem on the mechanics of hot air balloon flight that Euler was working on the very day of his death and provides a classroom capsule with suggestions for how the mathematics of balloon flight can be used in a contemporary differential equations or physics course. Instructors looking to incorporate the philosophy of mathematics into their courses or to undertake interdisciplinary collaborations may find useful "Numbers, Infinity, and Reality: An Interdisciplinary Undergraduate Philosophy of Mathematics Course," by Kevin DeLapp and Jessica Sorrells.

Euler considered the mathematics of balloons such as the Montgolfier brothers' *Aérostat Réveillon*. Library of Congress.

Convergence's article series have also seen growth this year. The first installment of V. Frederick Rickey's "Historical Notes for the Calculus Classroom" features "Fermat's Integration of Powers." Betty Mayfield is bringing attention to the "Historically Speaking" columns that ran in NCTM's *Mathematics Teacher* between 1953 and 1969 by pairing reprints of selected columns with new commentary placing the history and mathematics into context. The first two reprints share Carl Boyer's "The Quadrature of the Parabola: An Ancient Theorem in Modern Form," with commentary by William Dunham, and Philip S. Jones's "The Oldest American Slide Rule," with commentary by Peggy Aldrich Kidwell. *Convergence*'s existing series of reprints continues as well, with "Who? How? What? A Strategy for Using History to Teach Mathematics," by Patricia Wilson and Jennifer Chauvot. The winning entry in HOM SIGMAA's 2023 Student Paper Contest, "Nicole Oresme and the Revival of Medieval Mathematics" by Adin Charles Tinsley of Stony Brook University, has also been posted.

The introduction for "Historical Notes for the Calculus Classroom" includes a brief video in which Fred Rickey describes how these tidbits for teaching came about.

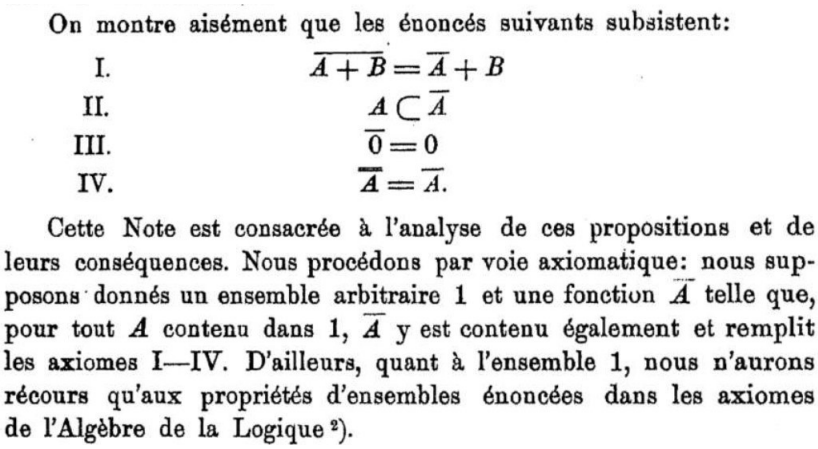
Two new entries have been added to the TRIUMPHS team's "A Series of Mini-projects from **TR**ansforming **I**nstruction in **U**ndergraduate **M**athematics via **P**rimary **H**istorical **S**ources":

"Fermat's Method for Finding Maxima and Minima: A Mini-Primary Source Project for Calculus 1 Students," by Kenneth M Monks;

"The Closure Operation as the Foundation of Topology: A Mini-Primary Source Project for Topology Students," by Nicholas A. Scoville.

And, Michael Molinsky's series of "Quotations in Context" features nine additional quotations about mathe-

matics and mathematicians, attributed to John Adams, Napoleon Bonaparte, Nicolaus Copernicus, Charles Darwin, Oliver Wendell Holmes, Jr., Robert J. Oppenheimer, James Joseph Sylvester, Voltaire, and Alfred North Whitehead.



On montre aisément que les énoncés suivants subsistent:

I. $\overline{A+B}=\overline{A}+B$

II. $A\subset\overline{A}$

III. $\overline{0}=0$

IV. $\overline{\overline{A}}=\overline{A}.$

Cette Note est consacrée à l'analyse de ces propositions et de leurs conséquences. Nous procédons par voie axiomatique: nous supposons donnés un ensemble arbitraire 1 et une fonction $\overline{A}$ telle que, pour tout A contenu dans 1, $\overline{A}$ y est contenu également et remplit les axiomes I—IV. D'ailleurs, quant à l'ensemble 1, nous n'aurons récours qu'aux propriétés d'ensembles énoncées dans les axiomes de l'Algèbre de la Logique [2]).

Excerpt from "Sur l'opération Ā de l'Analysis Situs" (1922), showing Kuratowski's four closure axioms for a topology.

Can you identify the typo?

As we continue through our 20th year of publication, *Convergence* celebrates co-founding editor Victor Katz, recipient of the MAA's Gung and Hu Distinguished Service Award, and mourns the death of co-founding editor Frank J. Swetz after an extended illness. Frank's enthusiasm for *Convergence*'s large collection of "Mathematical Treasures" lives on through new articles such as "A Mysterious Copy of Lacroix's *Traité Élémentaire de Calcul Différentiel et de Calcul Intégral*," by Adrian Rice.

Interested in contributing? We'd love to hear from you at convergence@maa.org! *Convergence* publishes expository articles on the history of topics in the grades 8–16 mathematics curriculum; translations of primary sources; classroom activities, projects, or modules for using history to teach mathematics; and classroom testimonials after applications of such activities, projects, or modules. For more details about Convergence's submission and refereeing process, please see our Guidelines for Authors.

HOM SIGMAA Student Travel Grants Available

HOM SIGMAA is pleased to announce travel grants to graduate and undergraduate students. Money is available to help students travel to meetings to present a paper or poster in the history of mathematics. Details can be found at the end of the newsletter and in the HOM SIGMAA community on MAA Connect.

A farewell to TRIUMPHS …. as a new TRIUMPHS begins:

TRansforming Instruction: Understanding Mathematics via Primary Historical Sources

On August 1, 2015, the TRansforming Instruction in Undergraduate Mathematics via Primary Historical Sources (TRIUMPHS) project officially began its funding from the National Science Foundation (NSF). Born out of foundational work on the use of primary historical sources to teach standard topics in undergraduate mathematics that was done under two previous NSF grants dating back to 2003, the aims of the TRIUMPHS project were two-fold:

- Expand the use of Primary Source Projects (PSPs) as a resource for teaching and learning undergraduate mathematics by supporting the continued development of high-quality student projects and promoting their use in a broad range of courses; and
- Expand the understanding of the STEM education community by contributing to the general knowledge base through research on the effects of teaching and learning with PSPs on students and their instructors.

A partial list of the project's achievements relative to these aims appears at the end of this article. While NSF funding for the initiative came to an end just days before MathFest 2023, we firmly believe that these results show that the case for teaching mathematics via primary historical sources has never been stronger — and that there has never been a better time for individuals interested in exploring its potential to come together!

For these reasons, it is with great pleasure that we announce the formation of the TRIUMPHS Society, TRansforming Instruction: Understanding Mathematics via Primary Historical Sources. The aims of this new society are to:

- bring together practitioners and others interested in the use of primary historical sources in the teaching and learning of mathematics;
- encourage and support the development and use of classroom resources based on primary historical sources;
- share teaching experiences and publicize research based on the implementation of such resources; and
- promote the proliferation of primary source-based pedagogy in mathematics through conversation and professional development.

Through its peer-reviewed journal, *The Annals of the TRIUMPHS Society*, the society intends to publish PSPs and similar classroom-ready materials, artifacts related to the development of such projects, and articles on scholarship related to the use of such materials …. if a topic is related to teaching and learning mathematics with primary historical sources, then it is potentially of interest to the journal. The *Annals* editorial board is currently working to establish a home for the journal. Editorial policies and submission guidelines are forthcoming.

Additionally, Dr. Abe Edwards (Michigan State University) is preparing a new NSF grant proposal which has two research aims:

- Investigate classroom implementation of PSPs as a means to explicitly attend to nurturing mathematical discourse; and
- Investigate student participation in classroom discourse and changes to students' mathematical identities that occur while learning from PSPs.

Once funded, this grant will provide participants with extensive professional development related to its research goals as well as implementation support and a small stipend.

For more information about becoming a participant in Dr. Edwards's *Nurturing Mathematical Discourse by Teaching with Primary Sources* project, email him at aedwards@msu.edu.

For more information about the new TRIUMPHS Society and journal, visit https://triumphssociety.org.

For more information about the PSPs and other achievements produced by the NSF-funded TRIUMPHS project, read on!

Summary Achievements of NSF-funded TRIUMPHS Project (2015-2023)

- 46 full-length Primary Source Projects (PSPs) and 53 shorter "mini-PSPs" have been written by 24 authors and co-authors for use in courses ranging across the undergraduate mathematics curriculum. Several of these projects also exist in multiple versions aimed at different audiences.
  - ◊ All of these PSPs have been scrupulously peer- and expert-reviewed, and are freely available for download and use by instructors and students.
    - ◊ A complete list of available projects can be found at https://nscoville.github.io/website/TRIUMPHS%20Available%20PSPs.pdf
    - ◊ Detailed descriptions of each are available at https://nscoville.github.io/website/TRIUMPHS_project_descriptions.pdf
    - ◊ Classroom ready versions of the PSPs themselves can be downloaded via either of the following websites
      https://blogs.ursinus.edu/triumphs/
      https://digitalcommons.ursinus.edu/triumphs/

      Instructors can also contact PSP authors to obtain edible LaTeX files of the projects for customization in their classrooms.
    - ◊ The Notes to Instructors section at the end of each PSP provides detailed information about its goals and implementation guidance.
  - ◊ Most mini-PSPs have also been published in *Convergence*, MAA's online journal for the history of mathematics and its use in teaching.
  - ◊ A print volume of 24 PSPs for real analysis, topology, and complex variables, *Teaching and Learning with Primary Source Projects: Real Analysis, Topology, and Complex Variables*, is now available for preorder as part of the Classroom Resource Materials Book Series of the MAA Press imprint of the American Mathematical Society. A second volume of PSPs (for precalculus, calculus, and differential equations) is currently in preparation for possible publication in the same book series.
- 133 instructors (including the PIs) officially used PSPs during the first 6 years of the TRIUMPHS grant alone, for a total of 436 distinct implementations in over 240 classrooms at 109 different institutions across the US and in Canada.
- A coordinated program of site tester support aimed at the development of faculty expertise in the use of PSPs offered two multi-day TRIUMPHS workshops held at Colorado University Denver in Fall 2016 and Fall 2018 and over fifteen workshops and mini-courses at regional, national, and international conferences.
- Substantive graduate student training in the use and development of PSPs was offered, with six mathematics doctoral students and three mathematics education doctoral students provided with co-teaching experiences that involved the teaching of eleven different courses in which PSPs were used, as well as the development of four new PSPs. These experiences took place at Florida State University, New Mexico State University, and Colorado University Denver under the mentorship of Drs. Kathy Clark, Jerry Lodder, and Diana White, respectively. A multi-day TRIUMPHS workshop specifically targeted at training graduate students in the classroom use of PSPs was also held at New Mexico State University in Summer 2019 and two additional students co-authored PSPs under the mentorship of external authors.

- Six research initiatives (3 related to student change and 3 related to faculty expertise) were carried out as part of the project's Evaluation-with-Research component, several of which are ongoing. These research results were widely disseminated, with members of the project's two Evaluation-with-Research working groups delivering a total of 23 presentations and 12 peer-/editor-reviewed publications to date, with a 13th manuscript currently under revision for resubmission and more expected to come.
- Regarding the development of future mathematics education researchers, five students at Florida State University received mentoring from Dr. Kathy Clark over the course of the grant. Prompted by his work with TRIUMPHS, the doctoral research of one of these students, Cihan Can, investigated aspects of instructor growth resulting from teaching with PSPs. Dr. Can defended in Fall 2019, making his dissertation the only one produced in the History and Pedagogy of Mathematics / Research in Undergraduate Mathematics Education domain in the US for many years.
- A robust program of PSP and general project dissemination was undertaken by the PIs, external authors, and site testers, with a total of 93 presentations and 44 peer-/editor-reviewed publications to date. The TRIUMPHS website, created and maintained by PI Nick Scoville, continues to serve as an important dissemination tool (e.g., as a venue for making the PSPs widely available), with a total of 107,157 visits to the TRIUMPHS website and 110,417 downloads of TRIUMPHS PSPs registered since its inception (through June 29, 2023). While a significant proportion of these visits have been from locations within the United States (47,760), the next five countries with the greatest number of downloads are: India (9,565), Canada (5,191), Philippines (4,320), United Kingdom (3,081), and Australia (1,849). An additional eight countries registered downloads of 1000 or more (Germany, Brazil, Pakistan, Italy, China, France, Spain, and Singapore).

Acknowledgement: The 2015–2023 TRIUMPHS project involved PIs at seven collaborating institutions: *Janet Heine Barnett (Colorado State University Pueblo), Kathleen M. Clark (Florida State University), Dominic Klyve (Central Washington University), Jerry Lodder (New Mexico State University), Danny Otero (Xavier University), Nick Scoville (Ursinus College), and Diana White (University of Colorado Denver).* The project was supported by funding from the National Science Foundation's Improving Undergraduate STEM Education Program under Grant Numbers 1523494, 1523561, 1523747, 1523753, 1523898, 1524065, and 1524098.

Founding members of the TRIUMPHS Society

Back row (L to R): Adam E. Parker, Michael P. Saclolo, Kathleen M. Clark, Mark Watford, Kenneth M Monks

Front row (L to R): Daniel E. Otero, Dominic Klye, Janet Heine Barnett

The History of Mathematics
Special Interest Group of the
Mathematical Association of America

is pleased to announce its first annual

Al-Khwarizmi Student Paper Contest in History of Mathematics in the Islamic Civilization, 8th-16th Century

This contest is open to all undergraduate students in the USA.

The purpose of this contest is to increase awareness and interest in the history of mathematics among undergraduates, and to encourage students to learn more about the contributions of the Islamic Civilization to mathematics.

First and second places winners will be chosen.

Winners will receive a one-year student membership in the MAA and HOM/SIGMAA, and a history of mathematics book.

Eligible Topics and Submission Guidelines

- Contributions of a scholar from the Islamic World to mathematics or geometry during such period
- Any topic in geometry or mathematics from this period by scholars in the Islamic World
- Contributions of multiple Islamic/Arabic scholars to a given subject/topic in mathematics in this period
- Connections of Islamic/Arabic Mathematics and the Arts
- Connections of Islamic/Arabic Mathematics and Architecture
- Influence of Islamic/Arabic Mathematics on other civilizations
- Submissions should be approximately 5000 words (approximately 12 double-spaced 12 pt. pages) in length
- Submissions should be in a single PDF file, including a cover page with title, name, school and full contact information
- Papers should include a full citation list
- Papers should not draw too heavily from web sources $^{\pi}$
- Submissions should include a cover sheet with: your name, the paper's title, your institution, supervising instructor if applicable, and email and permanent postal address
- Please submit electronic copy to the email addresses below
- Students submitting a paper need not be currently taking a history of mathematics course
- Only single-authored papers are eligible

Deadline for submission is **November 17, 2023**

Papers will be judged by a panel of specialists for content, originality, and presentation.

Results will be announced via email
and on the HOM SIGMAA website in December.

Submissions and questions can be directed to

Dr. AbdelNaser Al-Hasan
via email at: naser.alhasan@newberry.edu
OR
Dr. Noah Aydin
via email at: aydinn@kenyon.edu

[π] Web sources that give access to print material, such as JTSOR, are completely acceptable.

The History of Mathematics Special Interest Group of the Mathematical Association of America

is pleased to announce its 21st annual

Student Paper Contest in the History of Mathematics

This contest is open to all undergraduate students[π]

Papers will be judged by a panel of specialists for content, originality, and presentation. Typically first and second place winners are chosen.

Submission Guidelines

- Topics can be drawn from any field of mathematics.
- Papers can address a single person or topic, or be an historical survey of a topic or school of thought.
- Submissions should be approximately 5000 words in length with font that is easy to read.
- Submissions should be in a single PDF file, including a title page with title of paper, the author, school, and complete contact information.
- Papers should include a full citation list.
- Papers should not draw too heavily from web sources.[ϰ]
- Students submitting a paper need not be currently taking a history of mathematics course.
- All papers should be single-authored.
- Eligible papers are those written in the past year and while the author was an undergraduate.

Submission Deadline: April 30, 2024

Results will be announced to winners via email, on MAA Connect, and on the HOM SIGMAA website in May. Winning papers will be published on *Convergence*.

Submissions and questions can be directed to
Dr. Amy Shell-Gellasch ashellge@emich.edu

[π] Students who have graduated less than a year ago but wrote their paper while still an undergraduate may also participate. Graduate and high school students may also submit for an honorable mention.

[ϰ] Web sources that give access to print material, such as JSTOR, are completely acceptable.

HOM SIGMAA Small Grants

Guidelines and Procedures

Purpose: The HOM SIGMAA wants to aid its members in their quest to bring the joys of the history or mathematics to their students. These small monetary grants will allow HOM SIGMAA members to purchase items that will aid in learning the history of mathematics. For example, a classroom set of abacus or materials to make an historical model.

Guidelines

1. Recipients must be a current member of the HOM SIGMAA
2. The idea is to purchase items, materials to make a historical model, or materials that can be used year after year. (Not supplies that will be used up quickly.)
3. These materials may be used by an individual's colleagues, but belong to the HOM SIGMAA member and not their department.
4. Items or materials must clearly be for the instruction of a historical topic.
5. Grants will be for amounts up to $100 and considered on a rolling basis (so apply early in the year.)
6. Approval of the grant is at the sole discretion of the HOM SIGMAA executive board.
7. Applications can be made at any time, but may take several weeks to be approved and paid out by the MAA. So plan ahead.
8. Receipts for purchased items is preferable. But if purchase depends on funding, receipts may be required after purchase.
9. Total annual grants dispersed will not exceed $1000 per year and are subject to HOM SIGMAA funding needs.
10. Preference will always be given to first-time grantees. And the HOM SIGMAA has the right to deny any request if they feel a single member is requesting too often.

How to apply

Please send the application form (available on the HOM SIGMAA website) in Word or PDF to the Chair of the HOM SIGMAA via email.

HOM SIGMAA Classroom Small Grant

Name

Institution

Email

Phone

Address

Funds requested

Item(s) to be purchased

Purpose or use of items

HOM SIGMAA Student Travel Grants

Guidelines and Procedures

Purpose: The HOM SIGMAA wants to support students of the history of mathematics. We will offer travel grants (in the form of travel expense reimbursements) for students traveling to conferences to give a paper or poster on the history of mathematics. Grants are up to $250 for a local/regional/sectional meeting, and $350 for a national/international meeting. We encourage students to attend MAA meetings, but grants are not limited to MAA meetings. Submit application materials prior to the meeting; submit registration/travel/lodging receipts and verification of talk after the meeting.

Guidelines

1. Travel must be completed while a student or the summer immediately following graduation.
2. Approval of the grant is at the sole discretion of the HOM SIGMAA executive board.
3. Applications can be made at any time, but may take several weeks to be approved and are paid out by the MAA after travel is completed. So plan ahead.
4. Total annual grants dispersed will not exceed $1500 per year and are subject to HOM SIGMAA funding needs and will be considered on a rolling basis.
5. Preference will always be given to first-time grantees.

How to apply (prior to meeting):

1. Please send the application form (available on the HOM SIGMAA website) in Word or PDF to the Chair or Secretary of the HOM SIGMAA via email.
2. Have your research advisor email the Chair or Secretary of the HOM SIGMAA a letter verifying your status and stating the nature of your research.

Reimbursement (post meeting):

Email scans of the following to the HOM SIGMAA:

1. travel receipts totaling the grant amount or more
2. program page verifying your participation.

HOM SIGMAA Student Travel Grant Application

Full Name:

Status: (circle one) Graduate student Undergraduate student

Home Institution:

Email:

Address:

Conference title and session title:

Location and dates:

Title of talk/poster: