## KANSAS SECTION OF THE MAA

# KSMAA NEWS



VOLUME 13, ISSUE 1

**SPRING 2022** 

## SPRING 2022 MEETING

The Spring Meeting of the Kansas Section of the MAA is scheduled to be held April 8-9, 2022 on the campus of <u>Benedictine College</u> in Atchison, Kansas.



The invited speaker for the meeting is Dr. Lorin Crawford, a Senior Researcher at Microsoft Research New England. He also holds a position as the



RGSS Assistant Professor of Biostatistics at Brown University. His scientific research interests involve the development of novel and efficient computational methodologies to address complex problems in statistical genetics, cancer pharmacology, and radiomics (e.g., cancer imaging). A central theme of Dr. Crawford's research program is to take modern machine learning approaches and develop theory that enable their interpretations to be related back to classical genomic principles. His most recent work has earned him a place on Forbes 30

Under 30 list, The Root 100 Most Influential African Americans list, and recognition as an Alfred P. Sloan Research Fellow and a David & Lucile Packard Fellow for Science and Engineering.

The MAA visitor will be Dr. Edray Herber Goins. Dr. Edray Herber Goins is Professor of Mathematics at Pomona College. He has worked as a researcher at both Harvard and the National Security Agency; and has taught at both Caltech and Purdue. Professor Goins has published over 25 journal articles in areas such as applied mathematics, graph theory, number theory, and representation theory; and on topics such as Diophantine equations, elliptic curves, and African Americans in mathematics. He has given more than 200 invited addresses on his research, acted as a referee for nearly 20 different journals in mathematics, served on dozens of panels for the National Science Foundation (NSF), and been awarded more than \$1 million in external funding. Goins currently runs a federally-funded Research Experience



ternal funding. Goins currently runs a federally-funded Research Experience for Undergraduates (REU) titled Pomona Research in Mathematics Experience (PRiME).

Attendees have the option to attend the conference either in person or virtually. Registration costs are the same for both options: (\$50) General Registration, (\$45) MAA Members, and (\$15) Students

For more information and to register or to apply to give a talk, visit the meeting webpage at

https://www.benedictine.edu/events/maa/index.

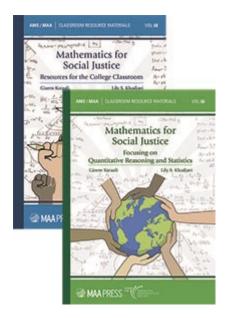
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## 2022 KANSAS COLLEGIATE MATH COMPETITION

The Kansas Collegiate Math Competition will be held in conjunction with the KSMAA section meeting on Saturday, April 9. Information will be sent to coaches via email. More information about the competition, including past exams and solutions, can be found at

https://www.pittstate.edu/math/kansas-collegiate-mathematics-competition.html.

## RECENT MAA PRESS BOOK



Edited by Gizem Karaali: Pomona College, Claremont, CA,

Lily S. Khadjavi: Loyola Marymount University, Los Angeles, CA

# Mathematics for Social Justice: Resources for the College Classroom

Mathematics for Social Justice offers a collection of resources for mathematics faculty interested in incorporating questions of social justice into their classrooms. The book begins with a series of essays from instructors experienced in integrating social justice themes into their pedagogy; these essays contain political and pedagogical motivations as well as nuts-and-bolts teaching advice. The heart of the book is a collection of 14 classroom-tested modules featuring ready-to-use activities & investigations for the college mathematics classroom. The mathematical tools and techniques used are relevant to a wide variety of courses including college algebra, math for the liberal arts, calculus, differential equations, discrete mathematics, geometry, financial mathematics, and combinatorics. The social justice themes include human trafficking, income inequality, environmental justice, gerrymandering, voting methods, and access to education. Volume 2 focuses on Quantitative Reasoning and Statistics. The books can be purchased individually or as a set. <a href="https://bookstore.ams.org/clrm-karaali-set/">https://bookstore.ams.org/clrm-karaali-set/</a>



MAA invites you to join the online community, MAA Connect. This MAA member benefit is designed for MAA members to connect, communicate, and collaborate with peers. This is a platform to share ideas, ask questions, and network.

You can log in to MAA Connect using your MAA membership username and password. The webpage at <a href="https://connect.maa.org/home">https://connect.maa.org/home</a> provides more information

on getting started and how to use MAA Connect. Use this information to set up your profile, or use the Getting Started instructions as you familiarize yourself with the platform.

Various communities are included in MAA Connect. For example, each MAA Special Interest Group (SIGMAA) has a community. In addition, each section has its own community. Visit the Kansas Section Community (Click on Communities and then My Communities) to post questions to members of the section, to view section announcements, or to peruse section newsletters.

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## NEW JOURNAL EULERIANA HAS LAUNCHED



We are proud to announce a new peer-reviewed journal, *Euleriana*, dedicated to the life and work of Leonhard Euler, with secondary foci on Euler's legacy and the wider world of scholarly work in the 18th century. See the journal's Aims and Scope (<a href="https://scholarlycommons.pacific.edu/euleriana/aimsandscope.html">https://scholarlycommons.pacific.edu/euleriana/aimsandscope.html</a>) for more information. The journal aims to be a leader in the expanding world of Euler scholarship.

Please peruse the contents of Volume 1 (<a href="https://scholarlycommons.pacific.edu/euleriana">https://scholarlycommons.pacific.edu/euleriana</a>) just recently published. We hope you find something interesting and meaningful in its pages.

We'd love to hear from you for future issues! Euleriana is accepting submissions, including translations, historical and archival notes, and book reviews. Potential authors are encouraged to contact the editors (Erik R. Tou, etou@uw.edu, and Christopher Goff, cgoff@pacific.edu) to inquire about papers before submission.

To subscribe to the Euleriana mailing list, please visit the issue and click the blue Follow button.

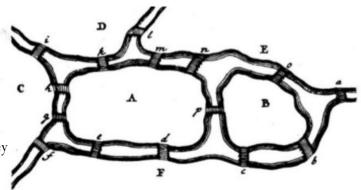
Thank you, and best wishes-

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The illustration of the Königsberg bridge problem from E53.



It all starts with Math

MAA MathFest returns, August 3-6, 2022 in Philadelphia!

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## HISTORY IN THE MAKING KANSAS SECTION HISTORICAL HIGHLIGHT BY TIM FLOOD, PSU, SECTION HISTORIAN

As we are all well aware, we are living in a historic time due to COVID-19 and its impact on every facet of our lives. The impact on the Kansas Section has been significant as well. Due to the pandemic, the section meeting for 2020 had to be cancelled and the meeting for 2021 was held virtually. We are hoping to be able to get back to in person meetings this spring at Benedictine College in Atchison.

This begs the question, "Has there ever been a time like this in the over 100-year history of the Kansas Section?" As with most historical questions, the answer is somewhat "Yes" and somewhat "No". In the *Kansas Section of the Mathematical Association of America 65 Years (1915-1980)* by Elaine L. Tatham, she provides a chronological listing of the meetings and writes, "The years 1918-1919 no meetings were held because of the war" and "Due to restriction on travel, there was no meeting during 1945". These appear to be the only times in the history of the section prior to 2020 that we have not been able to hold our annual meetings.

Certainly World War I was going on in 1918 and 1919, but there was something else of historic proportion occurring in the world and Kansas at that time. According to the Kansas Historical Society's *Kansapedia* webpage (<a href="https://www.kshs.org/kansapedia/flu-pandemic-of-1918/17805">https://www.kshs.org/kansapedia/flu-pandemic-of-1918/17805</a>) entitled "Flu Pandemic of 1918", "On March 4, 1918, an outbreak appeared at Fort Riley, with as many as 500 soldiers hospitalized within a week. Within a month, the number of patients dwindled and it seemed that the flu had passed its course." However, the webpage continues,

In fall 1918 a form of the disease returned to Kansas and government officials were quick to take action against the spread of the disease. Dr. Samuel J. Crumbine was the secretary of the state board of health and began a campaign to keep the public in Kansas well aware and educated about the flu and what people could do to prevent it. However, despite these measures there were still hundreds of deaths reported in Kansas, and eventually health officers were forced to close individual cities. By closing schools, public gatherings, theaters, church services, and limiting the number of people in a store at a time, the government officials in Kansas hoped to limit the outbreak and prevent more people from becoming sick.

Another wave of the epidemic returned in spring 1919; many believed this strain to be more severe. Reports said people could wake up healthy and be dead by nightfall. By the end of spring the number of influenza patients dropped so that official bans were lifted in cities and states; people resumed to school, church, and other activities.

(Sound familiar?)

So, was it the war or the pandemic that caused the cancellation of the 1918 and 1919 meetings of the Kansas Section?

The report "The April Meeting of the Kansas Section" in *The American Mathematical Monthly*, (July - Sept, 1920, Vol. 27, No. 7/9, pp. 283-285) appears to give a definitive answer, "The sixth regular meeting of the

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Kansas Section, postponed from 1918 on account of war conditions, was held at the Kansas State Agricultural College, Manhattan, Kansas, Saturday, April 3, 1920."

At the national level things were a bit different. According to *The Mathematical Association of America: Its First Fifty Years* published in 1972 by Kenneth O. May, there was no disruption in the meetings schedules for 1918 and 1919; however, "The December 1942 meeting was cancelled at the request of the Office of Defense Transport" and "The June 1945 meeting was cancelled by order of the Office of Defense Transport".

So, there have been a few times in our history, both as a section and at the national level, that our meetings have been cancelled due to world wars, but this appears to be the first time that our meetings have been disrupted by a pandemic. These truly are historic times!

## AMS-MAA TEXTBOOKS BY STEVE KENNEDY

The undergraduate textbook program of the AMS Books—MAA Press is an important component of the missions of the two societies to advance mathematics. The book program serves the needs of mathematician-authors by providing them a forum for disseminating their teaching visions. For those members of the Association and the Society engaged in teaching we provide a wide variety of rigorously edited and handsomely printed textbooks for every course in the undergraduate curriculum. The students in those courses can enjoy our beautifully written and reasonably priced textbooks.

At AMS-MAA books our work and our values are designed around the needs of these constituencies. We value clear and elegant exposition, so we subject all our textbooks to a rigorous peer-review and editing process. We value inspired teaching, so encourage and assist our authors in designing and including appropriate exercises. We understand the motivation and need for pedagogical innovation, so we actively seek out practitioners of alternative pedagogies and publish their work. We are, ourselves, mathematicians, so we understand deeply how a coherent vision of an area or subdiscipline can be a miraculous piece of art and we work to find authors whose vision we admire. We deeply love books, so we work with designers and craftsman to make physically attractive books that are a pleasure to hold and to read. We are the largest non-profit publisher of English-language mathematics textbooks in the world and we aspire to become simply the largest publisher of mathematics textbooks. We are a collective of mathematicians, working from within the mathematics community, to advance our science.

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Check out AMS/MAA Textbooks at

https://bookstore.ams.org/TEXT

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## KSMAA NEWSLETTER

The KSMAA Newsletter is published twice a year; once early in the year and then again in the fall. A link to each newsletter will be sent out via email by the MAA. The newsletters are also archived on the section webpage at <a href="https://www.kansas.maa.org/">https://www.kansas.maa.org/</a>.

The newsletter can also be a forum for sharing news or disseminating information to other mathematics departments across the state. If your department has any news to be included in the KSMAA Newsletter, please send it to KSMAA Public Information Coordinator:

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