## KANSAS SECTION OF THE MAA

# KSMAA NEWS

VOLUME 9, ISSUE 1

**SPRING 2018** 



## SPRING 2018 MEETING INFORMATION

The 2018 KSMAA meeting will be held at Johnson County Community College in Overland Park, KS on April 20-21, 2018 in the Carlson Center. Dr. Matt Boelkins will be the keynote speaker, speaking on *Calculus 2020*. Matt Boelkins is the Chair of the MAA Congress and Professor of Mathematics at Grand Valley State University. For more information on Dr. Boelkins, visit <a href="https://www.maa.org/about-maa/governance/Matt-Boelking">https://www.maa.org/about-maa/governance/Matt-Boelking</a> and <a href="https://faculty.gvsu.edu/boelkinm/Home/MB.html">https://faculty.gvsu.edu/boelkinm/Home/MB.html</a>.





Invited speaker, Dr. Mark Yannotta, Clackamas Community College, will present *Conventionalizing and Axiomatiz*-

ing: Mathematical activities that support the transition to more abstract mathematics. There will be an Interactive Joint session with Matt and Mark on Saturday with a general theme of communication and transition in mathematics at the 200/300 level.

Meeting registration will be:

- \$45 for MAA members,
- \$50 for non-members & day of meeting registration \$50, and
- \$15 for students.

Credit cards will be accepted via website registration. More information can be found at <a href="http://sections.maa.org/kansas/meetings.html">http://sections.maa.org/kansas/meetings.html</a>, including a link to the meeting webpage, abstracts of the keynote and invited addresses, and the call for presentations.

## CONGRATULATIONS TO DR. JEAN JOHNSON

Congratulations to Jean Johnson, Professor of Mathematics, Chair of the Department of Mathematics, Computer Science & Physics at Baker University, on receiving the 2017 KSMAA Meritorious Service Award!!! Her citation reads, "Jean Johnson has been an active member in the Kansas Section for more than twenty years. Jean often works quietly behind the scenes without receiving any recognition but her faithful attendance at annual meetings and participation in business meetings has provided a strong backbone for the Kansas Section. During 2000-2001, Jean served as the chair of the Kansas Section, hosting the Section Meeting at Baker University. Throughout the time of her involvement



with KSMAA, she has served on various committees, including the executive committee, nominations committees and bringing students to the meeting and competitions. Her effective leadership style was taken to the next level in 2009-2012 when she served as Governor of the Kansas Section. Through her quiet and consistent leadership, Jean is always there, willing to assist in any way to help the section and its members and provide a wonderful role model for other female faculty in the section."

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## 2018 KANSAS COLLEGIATE MATH COMPETITION

The 13th Annual Kansas Collegiate Mathematics Competition will be held on April 21, 2018, at Johnson County Community College, in conjunction with the 2018 MAA Kansas Section Meeting.

The competition will be held from 8:00am to 11:00am. Please register the teams by April 1 by submitting the form at the website

http://www.pittstate.edu/department/math/competition/

The competition will be a team competition. Teams may consist of two or three students. Any community college, college, or university in Kansas may send up to two teams. Each team will work together to solve a problem set of about 10 problems. Most of the problems will be accessible to sophomore students and even well-prepared freshmen who have had the calculus sequence, some probability, and some discrete mathematics. Each problem is worth 10 points and will be scored by faculty from participating schools. For full credit on a problem, the answer must be correct and all supporting work must be shown.

Calculators are allowed. No books, notes, or other electronic devices may be used during the competition.

Each institution registering a team must have a coach, who is expected to assist in grading the exam after the competition.

The members of the top six teams in the competition will receive cash prizes. The top three teams will receive plaques. In addition, there will be a cash prize for the members of the top scoring team from a community college.

Mat Johnson (matjohn@ku.edu) and Scott Thuong (sthuong@pittstate.edu) are co-organizing the competition - please direct questions about the competition to either of them. In addition, suggestions for problems to be included in the competition are welcome. Please email problems to Mat or Scott for consideration by April 1.

Information about the competition, along with past exams and solutions, can be found at

http://pittstate.edu/department/math/competition/

Registration for the competition is free. However, students are expected to register for the MAA Kansas Section Meeting.

## KSMAA AWARD FOR DISTINGUISHED TEACHING

The deadline for submitting nominations for the 2018 KSMAA Award for Distinguished College or University Teaching of Mathematics is March 1, 2018. More information and the nomination form are available on the section webpage at <a href="http://sections.maa.org/kansas/awards.html">http://sections.maa.org/kansas/awards.html</a>. The nomination form is also attached to this newsletter. Completed nomination forms should be emailed to the Awards Committee chair, Cynthia Huffman, at cjhuffman@pittstate.edu by the March 1st deadline.

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## UPCOMING MAA PROGRAMS AND DEADLINES

**Dolciani Mathematics Enrichment Grants** (**DMEG**) support projects designed to develop mathematical enrichment programs for talented students in middle or high school. The project proposal can be initiated by a teacher within the secondary math education field, but all projects must be partnered with an University. The deadline for proposals is **February 12, 2018**. Click <u>here</u> to learn more apply now!

**Tensor Grants for Women and Mathematics** support projects designed to encourage college and university women or high school and middle school girls to study mathematics. Projects can vary in style and should support the advancement of women in mathematics. The project proposal can be initiated by a teacher within the secondary math education field, but all projects must be partnered with an University. The deadline for proposals is **February 12, 2018**. Click <a href="here">here</a> to learn more apply now!

**Tensor-SUMMA** Grants: Strengthening Underrepresented Minority Mathematics Achievement support programs designed to encourage pursuit and enjoyment of mathematics among middle school students, high school students, and/or beginning college students from groups traditionally under-represented in the field of mathematics. Projects can be math clubs, math circles, or any enrichment piece and should support the advancement of underrepresented groups in mathematics. The project proposal can be initiated by a teacher within the secondary math education field, but all projects must be partnered with an University. The deadline for proposals is **February 12, 2018**. Click <a href="here">here</a> to learn more apply now!

**National Research Experience for Undergraduates Program** (**NREUP**) supports the participation of mathematics undergraduates from underrepresented groups in focused and challenging research experiences to increase their interest in advanced degrees and careers in mathematics. Proposals should be submitted by university faculty who would like to host a REU at their campus. The deadline for proposals is **February 23, 2018**. Click <a href="here">here</a> to learn more apply now!

**PIC Math** prepares mathematical sciences students for industrial careers by engaging them in research problems that come directly from industry. University faculty hold a semester-long course in the spring that challenges students to solve an industrial problem presented by an industrial partner; faculty receive training the summer before facilitating their course. Proposals should be submitted by university faculty who would like to host a PIC Math course at their campus. The deadline for proposals is **March 1, 2018**. Click <a href="here">here</a> to learn more apply now!



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## **NEW MATH MODELING CONTEST**

SIMIODE (A Systemic Initiative for Modeling Investigations & Opportunities with Differential Equations, <a href="https://www.simiode.org">www.simiode.org</a>) announces a new program for high school and undergraduate students: Student Competition Using Differential Equation Modeling—SCUDEM. This competition is for three member teams of students. SCUDEM takes place over a week-long period that begins on Friday, 13 April 2018, at each team's individual home campus and culminates on Competition Saturday, 21 April 2018, at a nearby regional host site in the United States and beyond. For complete details visit <a href="www.simiode.org/scudem">www.simiode.org/scudem</a>. We are seeking host sites and if you at your institution are interested see details at the same site.

There is a modest registration fee for team participation and faculty development workshop for faculty coach. Additional faculty may join workshop and judging activities at no cost. Registration will open on 1 February 2018, but schools should be planning their coaches and teams now.

SIMIODE – Systemic Initiative for Modeling investigations and Opportunities with Differential Equations is a 501 (c)3 Nonprofit organization. All can join SIMIODE free at <a href="www.simiode.org">www.simiode.org</a>. If your school is interested in becoming a local SCUDEM 2018 site please contact the Director. Contact Information: Dr. Brian Winkel, Director SIMIODE, Director@simiode.org, 26 Broadway, Cornwall NY 12518 USA, +1 845-534-4887.

## FLASHBACK TO 1917 (FROM THE MONTHLY)

## FOURTH MEETING OF THE KANSAS SECTION.

The fourth meeting of the Kansas Section of The Mathematical Association of America was held at the University of Kansas on Saturday, March 17. The Kansas Section is now following the plan of holding two meetings a year, one in November, at the time of the State Teachers' Association and the other in March. The meeting was given over entirely to discussing college algebra, and the time proved too short for the following program:

- "The content of Freshman algebra:" Professor W. H. Andrews, Kansas State Agricultural College.
  - 2. "Algebra courses for college Juniors and Seniors:"
- (a) For students preparing to teach: Professor U. G. MITCHELL, University of Kansas.
- (b) For students preparing to do research work: Professor W. H. GARRETT, Baker University.
- (c) For students preparing to enter applied sciences: Professor A. R. CRATHORNE, University of Illinois.

These papers were followed by general discussion and a business session.

The first topic, "The content of Freshman algebra," is of special interest to Kansas Colleges just now because recent legislative action has brought it about PAGE 5 KSMAA NEWS

## FLASHBACK CONTINUED

that a considerable part of next year's freshman class will enter college with only one year of high school algebra, a larger number will have had a year and a half, while a few will offer two years of preparatory algebra. The second number received independent consideration from three distinct viewpoints and much interest was manifested in noting the topics common to all and the relative emphasis placed upon them. The general discussion was enthusiastic and, in addition to covering points involved in the papers, raised the question of giving college students at some time in their course an acquaintance with building and loan investments and life insurance problems in so far as interest returns are concerned.

The following persons were in attendance, representing ten colleges and universities and five high schools: (A) Members—W. H. Andrews, State Agricultural College, C. H. Ashton, University of Kansas, A. R. Crathorne, University of Illinois, Lucy F. Dougherty, Kansas City High School, Elizabeth G. Flagg, Kansas City High School, W. H. Garrett, Baker University, Emma Hyde, Kansas City High School, S. Lefschetz, University of Kansas, Theodore Lindquist, State Normal School, Emporia, A. W. Larsen, University of Kansas, W. A. Luby, Polytechnic Institute, Kansas City, Mo., U. G. Mitchell, University of Kansas, Mary W. Newson, Washburn College, B. L. Remick, State Agricultural College, J. A. G. Shirk, State Normal School, Pittsburg, E. B. Stouffer, University of Kansas, E. M. Stahl, Midland College, L. L. Steimley, University of Kansas, J. N. Van der Vries, University of Kansas, J. J. Wheeler, University of Kansas, Ella Woodyard, High School, Kansas City. (B) Non-members—O. W. Dueker, Friends University, Eleanora Harris, Hutchinson High School, Mary Lloyd, Atchison High School, Stella M. Olcott, Topeka High School.

J. J. Wheeler, Secretary-Treasurer.

## MAA Instructional Practices Guide

The MAA has recently published an *Instructional Practices Guide*. This guide aims to share effective, evidence based practices instructors can use to facilitate meaningful learning for students of mathematics. It is designed as a "how to" guide focused on mathematics instruction at the undergraduate level, and is based on the concept that effective teaching is supported by three foundational types of practices: **classroom practices**, **assessment practices**, and course **design practices** all informed by empirical research as well as the literature on technology and equity.

More information, including a link to download the *Instructional Practices Guide* can be found at  $\frac{\text{https://www.maa.org/programs-and-communities/curriculum\%20resources/instructional-practices-guide}.$ 

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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. The section webpage can be found at <a href="http://sections.maa.org/kansas">http://sections.maa.org/kansas</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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