Strange Attraction

In 1963 meteorologist Edward Lorenz, trying to understand atmospheric convection, discovered instead chaos and the butterfly effect. (Thus absolving all future meteorologists of the responsibility of accurate weather prediction.) The Lorenz Attractor, the asymptotic end-state of all the trajectories of his system of differential equations, is, from a topological point of view, an extremely bizarre object: a strange attractor. We examine that topological strangeness in order to understand the richness of the possible behaviors of trajectories in the Lorenz system.

Registration and Hotel Info

The registration form and hotel information are available on the KSMAA webpage at http://sections.maa.org/kansas/meetings.html. The registration form is also attached to this newsletter. Deadline for registration is March 10, 2016.

Call for Contributed Talks

You are invited to give a talk at the Spring Meeting. Talks are to be between 15 and 20 minutes in length and may be on research topics or expository in nature and may deal with any topic in mathematics or mathematics education. Student talks, both from undergraduate and graduate students, are welcome.

The abstract form can be found at http://sections.maa.org/kansas/meetings.html and it is attached to this newsletter. Deadline for receipt of abstracts is March 10, 2016.

If you have questions about the meeting, please contact:

Lanee Young
Fort Hays State University
Hays, Kansas 67601
lyoung@fhsu.edu
(785) 628-5669
2016 Kansas Collegiate Math Competition

The 11th Annual Kansas Collegiate Mathematics Competition will be held on April 9, 2016, at Fort Hays State University, in conjunction with the 2016 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://faculty.pittstate.edu/~jwade/registration.html

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 Jeremy Wade (jwade@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 Jeremy 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 2016 KSMAA Award for Distinguished College or University Teaching of Mathematics is March 1, 2016. More information and the nomination form are available on the section webpage at http://sections.maa.org/kansas/awards.html. 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.
KSMAA BYLAWS REVISION

KSMAA is one of three sections up for bylaw review in 2015-2016. The MAA Committee on Sections made some recommendations for minor revisions to the KSMAA bylaws. The revisions included extending the terms of the secretary and treasurer to at least three years, adding language about diversity in the selection of committees, replacing the terminology “national MAA” or “national office” with “the Association,” increasing the business meeting quorum from 10 to 12, and being more consistent with capitalization. The proposed revised bylaws are attached to this newsletter and will be voted upon at the business meeting in April in Hays.

THROWBACK PICTURE—2009 PITTSBURG STATE

For more pictures from past meetings, visit http://sections.maa.org/kansas/ksmaapictures.html. If you have pictures from past KSMAA meetings that you are willing to share, please send them to Cynthia Huffman at cjhuffman@pittstate.edu
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Join us for MAA MathFest 2016 in Columbus, Ohio
August 3-6, 2016

KSMAAA Newsletter

The KSMAAA 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 http://sections.maa.org/kansas.

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 KSMAAA Public Information Coordinator:

Cynthia Huffman
Pittsburg State University
Pittsburg, KS 66762
cjhuffman@pittstate.edu
(620) 235-4409
Name and Contact Information

First Name: _______________     Last Name: _______________          Gender: ______

Affiliation: _________________________

Address: ________________________________________

City: __________     State:  __________     ZIP: __________

Phone: _______________     E-Mail: _______________

___ Check here if you are a member of the MAA

___ Check here if you would not like your name included in the list of participants

Category
Please select the description below that most closely matches your current position. (If a faculty member, please select the highest degree your institution offers.)

___ Faculty member – Associates Degree institution
___ Faculty member – Bachelor’s Degree institution
___ Faculty member – Master’s Degree institution
___ Faculty member – Doctorate institution
___ Business, industry, government
___ High School Teacher
___ Undergraduate student
___ Graduate student
___ Other

Registration Type (Make check payable to FHSU Department of Mathematics)

___ MAA Member: $40
___ Non-Member: $45
___ Student or K-12 Teacher: $15

A $15 late fee will apply to MAA Member and Non-Member registrations received onsite. A $10 late fee will apply to student or K-12 Teacher registrations received onsite. In order to avoid a late fee and guarantee lunch on Saturday you should register before March 10, 2016

Please mail the printed form and the check to:
Lanee Young
Department of Mathematics
Fort Hays State University
600 Park Street
Hays, KS  67601
Name(s): ________________________________________

Institution: _______________________________________

Address: _________________________________________

Phone: ______________        Email: ________________

Talk Title: _______________________________________

Abstract: ______________________________________________________________________

______________________________________________________________________________

______________________________________________________________________________

______________________________________________________________________________

______________________________________________________________________________

______________________________________________________________________________

Technology needed: _________________________________

Is the speaker a student? _____

Is the presentation suitable for a student audience? _____

Please return the form by March 10 to:

Lanee Young  
Department of Mathematics  
Fort Hays State University  
Hays, KS  67601

Or e-mail to lyoung@fhsu.edu. Please put “KSMAA Abstract” in the subject line.
SECOND CALL FOR NOMINATIONS FOR 2016 MAA KANSAS SECTION AWARDS FOR DISTINGUISHED COLLEGE OR UNIVERSITY TEACHING OF MATHEMATICS

Nominations for the 2016 MAA Section Awards for Distinguished College or University Teaching of Mathematics are still being accepted. The Kansas Section Selection Committee will determine the recipient of the award from those nominated. The awardee will be honored at the Spring 2016 meeting of the Section and will be widely recognized and acknowledged within the Section. The awardee will also be the official Section nominee for the MAA Deborah and Franklin Tepper Haimo Award for Distinguished College or University Teaching of Mathematics. There will be at most three national awardees, each of whom will be honored at the national MAA meeting with a certificate and check for $1000. A special session at that meeting is devoted to talks by the awardees on aspects of their teaching.

Anyone may make a nomination, but nominations from chairs or MAA liaisons in departments of mathematical sciences are especially solicited. An outline of the nomination process can be found on the web site [http://www.maa.org/awards/teachingawards.htm](http://www.maa.org/awards/teachingawards.htm)

We urge you to submit a nomination for the MAA Kansas Section Award if you have someone eligible and qualified in your department. Even if not selected this year, it is an honor for someone to have been nominated, and your candidate can likely be nominated again in a future year. Your department will receive recognition for its commitment to excellence in teaching, and the work done in preparing a nomination folder for your candidate is a tribute in itself. **Self-nomination is not permitted.**

Please discuss this memo with your colleagues and post it in a prominent place in your department.

**Eligibility**

- College or university teachers who currently teach a mathematical science at least halftime during the academic year in a public or private college or university (from two-year college teaching through teaching at the Ph.D. level) in the United States or Canada. Those on approved leave (sabbatical or other) during the academic year in which they are nominated qualify if they fulfilled the requirements in the previous year.
- More than seven years experience in teaching a mathematical science.
- Membership in the Mathematical Association of America.
**Guidelines for Nomination**

Nominees should

- Be widely recognized as extraordinarily successful in their teaching*
- Have teaching effectiveness that can be documented
- Have had influence in their teaching beyond their own institution**
- Foster curiosity and generate excitement about mathematics in their students.

* "teaching" is to be interpreted in its broadest sense, not necessarily limited to classroom teaching. It may include activities such as preparing students for mathematical competitions at the college level such as the Putnam Prize Competition or the Mathematical Contest in Modeling, attracting students to become majors in a mathematical science or to become Ph.D. candidates, working with pre-service or inservice teachers, etc.

** "influence beyond..." can take many forms, including demonstrated lasting impact on alumni, influence on the profession through curricular revisions in college mathematics teaching with wide-ranging impact, influential publications or innovative books concerned with the teaching of college mathematics, etc.

**Nominations must be submitted on the enclosed "Nomination Form."** Please follow the instructions on that form precisely to assure uniformity in the selection process.

Please email the completed nomination form to

Dr. Cynthia Huffman  
Chair, KSMAA Awards Selection Committee  
cjhuffman@pittstate.edu

**no later than March 1, 2016.**

Nominations for someone from another Section should be sent to the Secretary of the nominee's Section.

The KSMAAA Selection Committee will select the Kansas Section awardee soon after the February 1 deadline. After the selection is made, the nominator and awardee will be encouraged to complete and submit a full nomination packet (see [http://www.maa.org/awards/teachingawards.htm](http://www.maa.org/awards/teachingawards.htm)) in time for consideration for the national award for the following year.

We look forward to your participation in this exciting MAA venture of taking substantive action to honor extraordinarily successful teaching. We want to see such teaching recognized at all post-secondary school levels. We depend on you to help us identify those who merit such recognition.
Mathematical Association of America
Awards for
Distinguished College or University Teaching of Mathematics

Nomination Form

PLEASE TYPE
Nominee's Name (First name first): _________________________________________________
College or University Affiliation: __________________________________________________
College or University Address: ____________________________________________________
City: _____________________________________ State: ____________ Zip: ____________
Nominee's email address: _______________________________
Is the nominee a current member of the Mathematical Association of America? __________
Nominee's number of years teaching experience in a mathematical science: _______________
Has the nominee taught at least half time in a mathematical science during the current academic
year or during the previous year if on approved leave or sabbatical?_______________________
In the space below, please briefly describe the unusual personal and professional qualities of the
nominee that contribute to his or her extraordinary teaching success.

Name of nominator (First name first): _______________________________________________
Address: __________________________________________________________
Telephone: ______________________ Email: ____________________________________
Signature: ______________________ Date ___________________
Kansas Section Bylaws
(2015-2016 revision)

ARTICLE I
Name and Purpose

1. The name of this Section shall be the Kansas Section of the Mathematical Association of America (MAA).

2. The purposes of the Kansas Section shall be to advance the mission of the MAA on a Sectional level within the territory defined below in Article II; to offer guidance to the MAA as it forms and fulfills its mission; to provide professional development and networking activities for Kansas Section members and mathematics students; and to promote discussion and action on issues affecting mathematics teaching, learning, and research in the region.

ARTICLE II
Membership

The membership of the Kansas Section shall be members of the Mathematical Association of America whose MAA mailing addresses are in Kansas, postal codes 66001-67999. Exceptions may be made by the MAA membership department upon request of the affected member.

ARTICLE III
Officers

1. The officers of this Section shall be a Chair, a Vice-Chair, a Vice-Chair Elect, a Secretary and a Treasurer.

2. The Executive Committee of the Section shall consist of the officers of the Section, the Section Governor, the Information Coordinator, the Liaison Coordinator, the Historian, and the Competitions Coordinator.

3. The Vice-Chair Elect shall be elected at the annual business meeting of the Section or by electronic voting. After a term of one year, the Vice-Chair Elect will become Vice-Chair for a term of one year. After a term of one year, the Vice-Chair will become Chair for a term of one year. A Chair cannot be elected as Vice-Chair Elect for the term following his or her term as Chair.

The Secretary shall be elected or re-elected at the annual business meeting or by electronic voting in years congruent to 0 mod 3 and shall serve a three-year term.
The Treasurer shall be elected or re-elected at the annual business meeting or by electronic voting in years congruent to 1 mod 3 and shall serve a three-year term.

The new officers shall assume the office upon adjournment of the annual business meeting. Ties shall be resolved by the Nominating Committee.

The Information Coordinator, the Liaison Coordinator, the Historian and the Competitions Coordinator shall be appointed or re-appointed by the chair for two year terms.

4. The slate of officer candidates shall be nominated by the Nominating Committee, but this shall not prevent other nominations being made by a member at the time of the annual meeting.

5. The Chair shall preside at each business meeting of the Section and at each meeting of the Executive Committee. The chair shall appoint committees of the Section except as provided otherwise in these bylaws and shall be an ex officio member of each such committee. The chair shall appoint the Information Coordinator, the Liaison Coordinator, the Historian and the Competitions Coordinator.

The Vice-Chair shall be the chair of the Program Committee and shall be responsible for the organization of the annual program meeting, both the program and the arrangements. The Vice-Chair shall, in the absence of the Chair, perform the duties of the Chair.

The Vice-Chair Elect shall be a member of the Program Committee.

The Secretary shall keep minutes of business meetings (including meetings of the Executive Committee), preserve records of the Section, maintain files of official correspondence of the Section, notify members of all regular and special meetings, and notify members of the Executive Committee of meetings of that group. The secretary is responsible for sending meeting reports after each meeting of the Section and an annual Section report to the Committee on Sections. Archival materials are to be forwarded to the Section Archives at the end of the Secretary’s term.

The Treasurer shall collect any voluntary Section dues and/or registration fees, receive funds provided by MAA, and arrange for the safekeeping of all Section monies. The Treasurer shall maintain proper and accurate books of account of such monies. The Treasurer shall have responsibility for paying the bills of the Section. The Treasurer shall prepare an annual report for the business meeting of the Section and shall file an annual report with the MAA headquarters office.

The Information Coordinator shall manage the Section newsletter and the Section web site, posting items sent by the officers and items deemed appropriate by the Information Coordinator.
The Liaison Coordinator shall work with MAA to recruit MAA Department Liaisons for each mathematics department in the Section. The Liaison Coordinator shall disseminate information intended for all Section members.

The Historian will maintain the Section Archive and keep the history up to date.

The Competitions Coordinator shall coordinate the student competitions of the Section. The Competitions Coordinator shall serve on the Program Committee.

6. The Executive Committee shall conduct the affairs of the Section between meetings of the Section membership. The Executive Committee shall annually review all operations of the Section and make recommendations to the Vice-Chair regarding the annual business meeting. Six members will constitute a quorum. Meetings of the Executive Committee may be held electronically.

The Executive Committee is empowered to fill any vacancy among the officers of the Section until the next business meeting.

ARTICLE IV
Meetings

1. The Section shall hold one business meeting and one program meeting each year. The time and place of these meetings shall be decided by the Executive Committee. These meetings will normally be held in the spring.

2. The program and arrangements for the annual program meeting shall be planned by the Vice-Chair in consultation with the Program Committee.

3. Additional program meetings may be organized, the time and place of which shall be determined by the Executive Committee.

4. The business meeting shall be planned by the Chair in consultation with the Executive Committee.

5. The quorum for a business meeting shall consist of not fewer than twelve members of the Section and no business may be validly transacted at business meetings where less than a quorum is present.

6. The Section may hold special business meetings, the time and place of which shall be determined by the Executive Committee, unless otherwise designated by a resolution by the members at a meeting.
7. Each member of the Section shall be notified at least ten days in advance of any program or business meeting of the Section.

ARTICLE V
Fees and Use of Assets

1. A registration fee as determined by the Vice-Chair in consultation with the Executive Committee shall be collected from those registering at each program meeting of the Section. Such fees shall be used to help pay the expenses of conducting the business of the Section.

2. The assets of the Kansas Section shall be used exclusively to further the purposes of the Section and, in the event of the dissolution of the Section, the remaining assets shall be returned to MAA for uses consistent with the purposes of the Association.

ARTICLE VI
Committees

1. The standing committees of the Section shall be the Program Committee, the Teaching Award Selection Committee, and the Nominating Committee.

2. The Program Committee is responsible for planning the Section program meeting. The Program Committee will consist of the Vice-Chair, the Vice-Chair elect, the Competition Coordinator and at least two other members of the Kansas Section who shall be appointed by the Vice-Chair.

3. The Teaching Award Selection Committee is responsible for soliciting nominations for the Kansas Section Award for Distinguished College or University Teaching of Mathematics, selecting the recipient, and reporting the result to the Secretary in a timely manner; and to select the Section’s nominee for the Deborah and Franklin Tepper Haimo Award each year. The Chair will appoint at least three members for a Teaching Award Selection Committee and designate one of the members as chair. The Chair should attempt to select a committee that will reflect the diversity of the Association and minimize implicit bias.

4. The Nominating Committee is responsible for developing a slate of officer candidates. The Chair will appoint at least three members for a Nominating Committee and designate one of the members as chair. The Chair should attempt to select a committee that will reflect the diversity of the Association and minimize implicit bias.

5. Other committees may be appointed by the Section Chair, upon the advice of the Executive Committee, to serve specified purposes and for designated periods of time.
ARTICLE VII
Amendments to Bylaws

1. Amendments to the bylaws may be proposed by the Executive Committee or by the written endorsement of at least three members of the Section to the Executive Committee.

2. Subject to subsequent approval by the Board of Governors of the Mathematical Association of America, these bylaws may be amended by receiving a two-thirds majority of the votes cast by a quorum at a business meeting of the Section.

3. The Secretary of the Section shall notify each member of the Section of any proposed amendment(s) at least 15 days prior to the meeting at which voting on the proposed amendment(s) takes place.

4. A complete revision of these bylaws shall be subject to all of the same procedures required for other amendments to these bylaws.