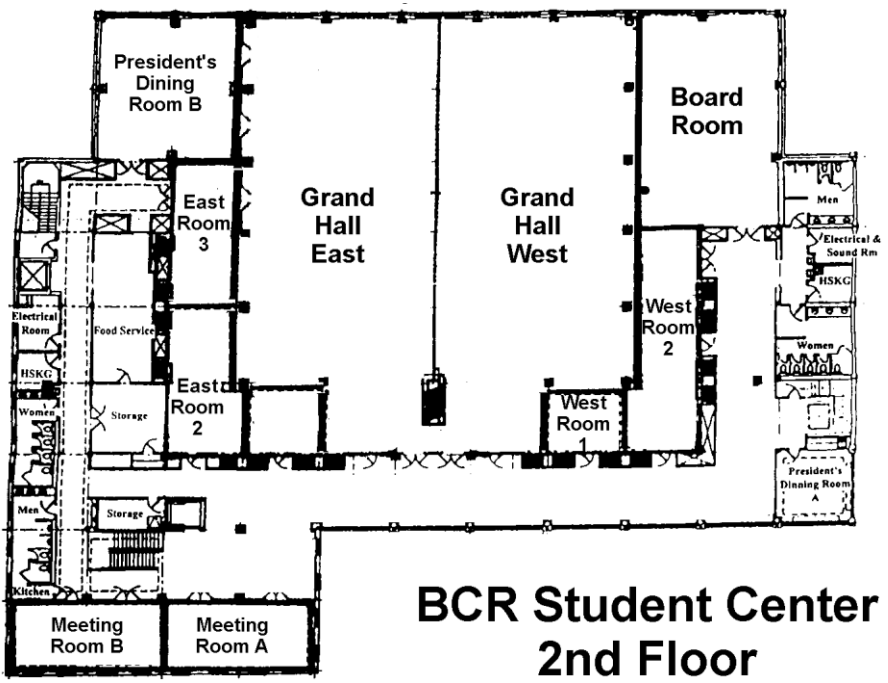
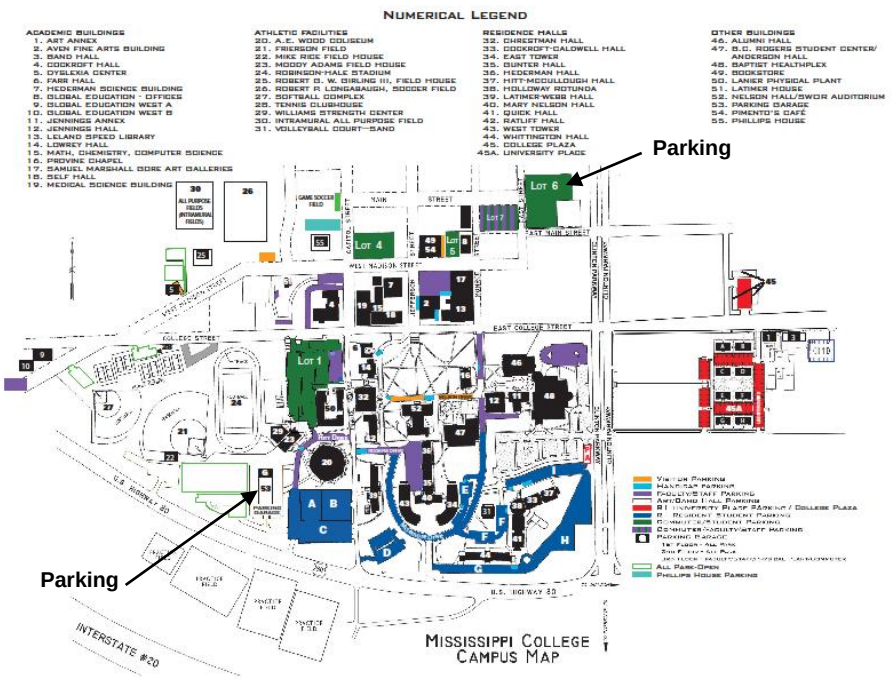
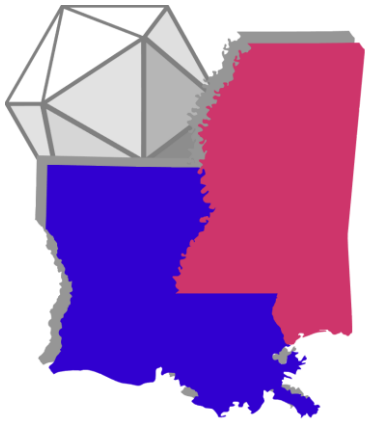

President's Dining Room B
Board Room
East Room 3
Grand Hall East
Grand Hall West
Men
Electrical & Sound Rm
HSKG
Electrical Room
Food Service
West Room 2
Women
HSKG
East Room 2
Storage
West Room 1
Women
President's Dinning Room A
Men
Storage
Kitchen
Meeting Room B
Meeting Room A
BCR Student Center
2nd Floor


NUMERICAL LEGEND
ACADEMIC BUILDINGS
1. ART ANNEX
2. AVEN FINE ARTS BUILDING
3. BAND HALL
4. COCKROFT HALL
5. DYSLEXIA CENTER
6. FARR HALL
7. HEDERMAN SCIENCE BUILDING
8. GLOBAL EDUCATION - OFFICES
9. GLOBAL EDUCATION WEST A
10. GLOBAL EDUCATION WEST B
11. JENNINGS ANNEX
12. JENNINGS HALL
13. LELAND SPEED LIBRARY
14. LOWREY HALL
15. MATH, CHEMISTRY, COMPUTER SCIENCE
16. PROVINE CHAPEL
17. SAMUEL MARSHALL DORE ART GALLERIES
18. SELF HALL
19. MEDICAL SCIENCE BUILDING
ATHLETIC FACILITIES
20. A.E. WOOD COLISEUM
21. FIKERSON FIELD
22. MIKE RICE FIELD HOUSE
23. MOODY ADAMS FIELD HOUSE
24. ROBINSON-HALE STADIUM
25. ROBERT B. W. BIRLING III, FIELD HOUSE
26. ROBERT R. LONGABAUGH, SOCCER FIELD
27. SOFTBALL COMPLEX
28. TENNIS CLUBHOUSE
29. WILLIAMS STRENGTH CENTER
30. INTRAMURAL ALL PURPOSE FIELD
31. VOLLEYBALL COURT--SAND
RESIDENCE HALLS
32. CHRESTMAN HALL
33. COCKROFT-CALDWELL HALL
34. EAST TOWER
35. GUNTER HALL
36. HEDERMAN HALL
37. HITT-MCCULLOUGH HALL
38. HOLLOWAY ROTUNDA
39. LATIMER-WEBB HALL
40. MARY NELSON HALL
41. QUICK HALL
42. RATLIFF HALL
43. WEST TOWER
44. WHITTINGTON HALL
45. COLLEGE PLAZA
45A. UNIVERSITY PLACE
OTHER BUILDINGS
46. ALUMNI HALL
47. B.C. ROGERS STUDENT CENTER/ ANDERSON HALL
48. BAPTIST HEALTHPLEX
49. BOOKSTORE
50. LANIER PHYSICAL PLANT
51. LATIMER HOUSE
52. NELSON HALL/SWOR AUDITORIUM
53. PARKING GARAGE
54. PIMENTO'S CAFE
55. PHILLIPS HOUSE
Parking
Lot 6
Lot 4
Lot 1
EAST MAIN STREET
EAST COLLEGE STREET
COLLEGE STREET
U.S. HIGHWAY 80
INTERSTATE #20
Parking
MISSISSIPPI COLLEGE
CAMPUS MAP

The Mathematical Association of America
Louisiana/Mississippi Section
96th Annual Meeting



Mississippi College
Clinton, MS
February 22-23, 2019

Welcome to Mississippi College:

I would like to thank the Executive Committee for entrusting me as the Program Chair of this year's conference. There are so many people that worked extremely hard to make this conference come together. I can't possibly list everyone, but I would like to thank the Executive Committee, the various section committees and those who serve on panels and discussion groups for even making this conference possible.

Additionally, I want to thank my colleagues here at Mississippi College for all of their help and guidance over the past weeks and months. Thank you to John Travis and Tommy Leavelle for all your advice and help. Thank you to Kelli Tatum, Charlotte McMath, Melinda Gann, and Daniel Watson for attending to a thousand details.

Further, I am thankful to our MAA representatives Rachel Levy and Michael Pearson for their participation in this meeting. I would like to thank Francis Su for presenting this year's Anderson Lecture – the first year that we have made this talk open to the public. Additional thanks go out to Michael Jones for presenting our student luncheon lecture.

Again, I wish to welcome all of you to Clinton, Mississippi; I hope you enjoy your stay on the Mississippi College campus and in the local area.

Kevin Burns
Program Chair, LA/MS Section of the MAA

Local Contact Numbers for Kevin Burns:

601.925.3468 (office) 571.357.0852 (cell)

Schedule of Events

Thursday, February 21, 2019

Registration	5:30-9:00	MCC Lobby
Integration Bee	6:30-9:00 (Pizza at halftime)	MedSci 210

Friday, February 22, 2019

Registration	8:00-4:00	2nd Floor BCR Lobby
Student Team Comp.	8:00-11:00	Grand Hall East
Section NExT	8:30-11:00	Meeting Room A
Student Luncheon	11:15-12:30	Grand Hall East
Student Speaker, Michael Jones, Mathematics Magazine Editor		
Opening Session	1:15-2:30	Grand Hall West
Student Papers	2:30-5:00	President's Dining Room B
Contributed Papers I	2:30-5:00	Meeting Room A
Panel Discussion	3:00-4:00	Grand Hall West
Anderson Lecture	5:00-6:00	Grand Hall West
Banquet	6:30-8:30	Grand Hall East

Saturday, February 23, 2019

Registration	9:00-10:00	2nd Floor BCR Lobby
Contributed Papers II	9:00-10:40	Meeting Room A
Math Education as a Career presentation	10:00-10:45	Grand Hall West
Business Meeting	11:00-12:00	Grand Hall West
Executive Committee	12:00-12:15	Meeting Room A

Throughout the Meeting

- Book Exhibits and Institutional Partner Displays will be in the Board Room Friday from 8:00-5:00 and Saturday from 9:00-11:00.
- Coffee and other refreshments will be available in the Board Room. Members are encouraged to gather in this area for socializing.
- Registration will be held in the lobby outside the Grand Hall.

Opening Session

Friday, February 22, 2019
1:15pm – 2:30pm

Welcome from Mississippi College – Blake Thompson, President
Introduction of Invited Speaker – Michael Pearson
Invited Presentation – Rachel Levy

"Mathematical Modeling: from Kindergarten to Industry"

Anderson Lecture

(Open to the public)

5:00-6:00 Francis Su – "Mathematics for Human Flourishing"

Banquet

Friday, February 22, 2019

6:30-8:00 Dinner – Menu – Strawberry Spinach Salad, Roasted Vegetable Blend, Wild Rice, Tilapia with Lemon Caper Sauce, Pecan Chicken with Creole Mustard Sauce, Rolls and Butter, Chocolate Dipped Cheesecake, Tea, Water and Coffee

Business Session

Saturday, February 22, 2003
11:00am-noon

Opening Comments – Kevin Burns
Section Representative Report – Judith Covington
Section Chair Report – Jana Talley
Section NExT Committee Report – Carmen Wright
Proceedings Committee Report – James Reid
Treasurer's Report – Christy Sue Langley
Outstanding Teaching Committee Report – John Perry
Necrology Committee Report – Jana Talley
Location and Nomination Committee Report – Ross Chiquet
Student Papers Committee Report – Haiyan Tian
Student Competition Report – Randy Wills/Tilak De Alwis
Closing Comments – Kevin Burns

Panel Discussion – Friday, 3:00pm-4:00pm
Panel: Rachel Levy, Michael Pearson, Michael Jones
Moderator: John Travis

What can the MAA offer you? What is new at the MAA with respect to national meetings, MAA organization and publications? Three MAA experts give insights and answer your questions.

Get the Facts Out – Saturday, 10:00am-10:45am:
Dr. Judith Covington, Northwestern State University of Louisiana

Math and science majors may be interested in teaching but not pursuing it as a career. Why? Research shows they may believe such things as teacher pay is a lot less than other jobs, teachers can't retire, and teachers are unhappy. **Get the Facts Out** resources can help counter these "myths" with data and empirical studies..

Contributed Papers

Student Papers
2:30pm – 5:00pm, Friday, President's Dining Room B

Faculty and Ph.D. Candidate Papers

Session I	2:30pm - 5:00pm, Friday, Meeting Room A, Tommy Leavelle
Session II	9:00am – 10:40am, Saturday, Meeting Room A, John Travis

Discussion Sessions and Papers Sessions at a Glance:

	Discussion Sessions Friday	**SESSION I Friday, 2:30 - 5:00 Meeting Room A**	**STUDENT PAPERS Friday 2:30-5:00 President's Dining Room B**
2:30		***Engaging Students: Probability and Odds*** – Jing Wang, Christian Brothers University	***The Behavior of Fractions with Prime Denominators and Their Decimal Expansions -*** Jonathon Villareal, Northwestern State University
2:50		***L-polar Decomposition of the Lorentz Group O(1,n)*** - Edgar Reyes, Southeastern Louisiana University	***Hunting Cooperation in the Middle Predator in Three Species Food Chain Model -*** Rimsha Bhatta, University of Southern Mississippi
3:10	Panel Discussion 3:00-4:00 Grand Hall West *What Can the MAA Do for You*?	***The LaPREP STEM Program*** - Carlos Spaht, LSU Shreveport	***Probabilistic Analysis of Revenues in Online Games –*** Nishchal Sapkota, University of Southern Mississippi
3:30		***Origami Math*** - Zolt Lengvarszky, LSU Shreveport	***A Numerical Method for Solving a System of Nonlinear Differential Equations -*** Kyle Martin, Southeastern Louisiana University
3:50		***An Adaptive Method of Fundamental Solutions for Aolving the Laplace Equation*** – Jaeyoun Oh, University of Southern Mississippi	***Predator Prey Interaction Model with Hunting Cooperation among Predators and Allee Effect in Prey –*** Aaditya Kharel, University of Southern Mississippi
4:10			***A Remark on Bicyclic Antiautomorphisms of Mendelsohn Triple Systems –*** Brittian Qualls, McNeese State University
4:30			***Introduction to Sabermetrics –*** Jason Jones Jr., McNeese State University

	Discussion Session Saturday	**SESSION II Saturday 9:00-10:40 Meeting Room A**
9:00		***A Flipped Classroom Approach to a Second Semester Calculus Course*** – Daniel Watson, Mississippi College
9:20		***Using Games in Education*** – Christy Sue Langley, University of Louisiana Lafayette
10:00	Get the Facts Out 10:00 -10:45 Grand Hall West *A presentation by Judith Covington*	***Not Sure, Maybe… "IBL for Beginners," "Our Experiences with IBL," "411 of IBL"*** – Liza Bondurant, Catherine Putnam, and Chelsea Townsend Delta State University

MAA Invited Speaker – MAA Deputy Executive Director Rachel Levy
1:15pm – Friday, February 22, 2019

Mathematical Modeling: from Kindergarten to Industry

Mathematical Modeling is taking off at all levels of mathematics education and provides one way for students to develop meaningful connections between mathematics and the world around us.

In my research, I have explored whether students as young as Kindergarten can engage in mathematical modeling in ways that resonate with the ways my undergraduates at Harvey Mudd College engaged in industry-based problems. This requires the modelers to develop and justify a useful solution to a complicated problem.

Now as Deputy Executive Director of MAA, I get to support programs like MAA PIC Math, which prepare university faculty to create undergraduate courses focused on industrial problems and the MAA AMC mathematics contests, which provides opportunities for middle, high school and college students to experience challenging mathematical problem solving.

In this talk I will share with you some surprising insights from four years following elementary school teachers engaging their students as mathematical modelers and discuss how this work impacted my own practice as a mathematical modeling educator and researcher.

Bio: Rachel Levy is in her first year as Deputy Executive Director of the MAA. Previously she was Professor of Mathematics and Associate Dean for Faculty Development at Harvey Mudd College and Vice President for Education for the Society for Industrial and Applied Mathematics. Her most recent book, written with Rick Laugesen and Fadil Santosa, is the BIG Jobs Guide, which helps people with expertise in the mathematical sciences prepare for internships and jobs in Business, Industry and Government (BIG).

Banquet Invited Speaker – Francis Su
5:00pm – Friday, February 22, 2019

Mathematics for Human Flourishing

Why does the practice of mathematics often fall short of our ideals and hopes? How can deeply human themes motivate us to teach and learn mathematics? I have been advancing the message that mathematics helps people flourish, no matter what they choose to do with their lives or careers. And for people to want to learn mathematics, they have to see how math connects to their deepest human desires. I believe this is an important message, especially for educators, and I will describe some of the reactions I've received.

Bio: Francis Su is the Benediktsson-Karwa Professor of Mathematics at Harvey Mudd College, and past president of the Mathematical Association of America. He received his B.S. in Mathematics from UT-Austin and his Ph.D. from Harvard. He also has a passion for popularizing mathematics. From the MAA, he received the 2018 Halmos-Ford writing prize, and the 2013 Haimo Award for distinguished teaching. He authors the popular Math Fun Facts website and is creator of "MathFeed," the math news app. His book "Mathematics for Human Flourishing" will be published by Yale University Press in 2019.

Student Luncheon Speaker – Michael A. Jones, Ph.D., Editor, Mathematics Magazine
11:30-12:30 – Friday, February 22, 2019

A Voting Theory Approach to Golf Scoring

A surprising result in voting theory is that an election outcome may depend on how votes are tallied after the ballots are cast. This election scenario is relevant to the outcome of golf tournaments because the Professional Golfer's Association (PGA) is the only professional sports league in the U.S. that changes the method of scoring depending on the event. The PGA's stroke play and modified Stableford scoring system are equivalent to using different voting vectors to tally an election. This equivalence is discussed and data from the Masters and International Tournaments are used to examine the effect of changing the scoring method on the results of the tournament.

By focusing on 3-candidate elections, I will show how elementary linear algebra and convexity can be used to explain the effect of changing the voting vector. Sometimes, regardless of the voting vector used, the same outcome would have occurred, as in the 1992 US Presidential election. Can this happen in golf? I answer this question and determine whether there exists a golf-scoring method in which Tiger Woods would not have won the 1997 Masters, as his performance is considered one of the best ever.

All students and their faculty advisors are encouraged to enjoy this complementary luncheon. Special thanks to those individual and institutional partners who help support this event.

Textbook publisher Pearson contributed funds for the coffee and other refreshments available during this meeting.

Thanks to the following local businesses and groups that provided items for this meeting:

Newk's
Applebee's
BankPlus
Arrow Printers
Froghead Grill
Edwin Watts Golf Shop
Mississippi College Alumni Association
Mississippi College Bookstore
Clinton Chamber of Commerce

The following institutions are current institutional members of our section. Funding from these memberships helps support the section's student activities:

Mississippi College

University of Mississippi

Jackson State University

McNeese State University

University of Louisiana at Lafayette

Northwestern State University

Mississippi State University

Southeastern Louisiana

University of Southern Mississippi