

A Word from the Section Chair

I am very pleased to welcome you to McNeese State University and Lake Charles. We have an active program and many things for you to do. I hope you enjoy your stay in this unique and beautiful corner of the South. If there is anything I can do to make your trip better, please let me know.

One nice thing about being Section Chair is the people you work with and get to know much better. Another is getting the front page of the program to say pretty much whatever you want. I plan to use mine thanking the people who have made this past year survivable.

When I volunteered to chair the Lake Charles meeting, I had no idea what I was getting myself into; I didn't even make my first executive committee meeting (I went to the wrong building). The Section's Executive Committee has done an incredible job helping me along, and answered endless questions. The Section is in very good hands with these people on the job.

A special "thank you" is in order for **Dr Jenna Carpenter** and the Section NExT Committee, who guided the Section NExT program and took care of arranging the fourth meeting of our Section NExT.

I want especially to thank our National MAA representatives, **Dr Martha Seigel**, National MAA Secretary, and **Dr Michael Pearson**, Executive Associate Director, Programs and Services of the MAA. Also, thanks to our Section NExT speaker, **Dr Johnny Lott** of the University of Mississippi and our Student Luncheon Speaker, McNeese Alumna, **Ms Bobbie Swan** of NASA's Johnson Space Center.

The Department of Mathematics, Computer Science, and Statistics has earned special gratitude. The entire Department has been almost falling over themselves to help put this meeting on. In particular, my Co-Chair, **Dr Christine Gorton**, has gone well above and beyond the time and effort asked, and made this meeting a pleasure to put together.

Finally, I want to thank everyone who took the time, effort, and expense to come to our meeting. It is a joy to be a part of such a large group of professionals and students coming together to teach, learn, and expound mathematics. If anyone needs anything for the week or so past the meeting, I will be hiding under my bed with a large pointy stick.

Lenny Ornas
Chair, LA/MS Section of the MAA

Local Contact Numbers: 475-5788 (math office), 475-5805 (meeting chair)

Schedule at a Glance

Thursday Evening

Registration GAYLE HALL	4:30 PM – 7:30 PM
Integration Bee GAYLE HALL AUDITORIUM	6:30 PM – 9:00 PM
Section NExT Dinner	7:00 PM
Reception GAYLE HALL ANNEX	8:00 PM

Friday

Registration KIRKMAN HALL 107	8:00 AM – 4:00 PM
Hospitality and Book Room KIRKMAN HALL 107	8:00 AM – 4:00 PM
Student Team Competition GAYLE HALL AUDITORIUM	8:30 AM – 11:00 AM
Section NExT, session I: <i>Get involved in the MAA!</i> KIRKMAN HALL 140	8:00 AM – 9:00 AM
Section NExT, session II: <i>Who are the Best Mathematics Teachers?</i> KIRKMAN HALL 140	9:15 AM – 10:15 AM
Section NExT, session III: <i>Using Technology to Reach Your Students</i> KIRKMAN HALL 140	10:30 AM – 11:30 AM
Student Luncheon GAYLE HALL AUDITORIUM	11:30 AM – 12:30 PM
Department Head Luncheon COWBOY ROOM, NEW RANCH	11:30 AM – 12:30 PM
Opening Session and Outstanding Teacher Address BAKER AUDITORIUM	1:15 PM – 2:30 PM
Student Papers KIRKMAN HALL 108	2:45 PM – 4:45 PM
Contributed Papers, sessions I & II KIRKMAN HALL 111 & 115	2:45 PM – 5:00 PM
Special Session I: <i>Course Redesign in Freshmen Level Mathematics</i> KIRKMAN HALL 109	2:45 AM – 3:45 PM
Cajun Banquet Music by <i>Little Chenier</i> COWBOY CLUB	6:30 PM – 8:30 PM

Schedule at a Glance

Saturday

Liaison Breakfast COWBOY ROOM, NEW RANCH	7:30 AM – 8:30 AM
Registration KIRKMAN HALL 107	8:00 AM – 11:00 AM
Contributed Papers, sessions III & IV KIRKMAN HALL 111 & 108	8:10 AM – 9:45 AM
Special Session II: <i>A Conversation about K–12 Education in LA and MS</i> KIRKMAN HALL 109	8:30 AM – 9:30 AM
Invited Talk Martha Siegel: <i>Industrial Mathematics for Fun and Profit</i> BAKER AUDITORIUM	10:00 AM – 11:00 AM
Business Meeting BAKER AUDITORIUM	11:15 AM – 12:15 PM
Executive Committee Meeting BAKER AUDITORIUM	12:30 PM

Throughout the Meeting

Book Exhibits will be in Kirkman Hall 107 from 8:00 AM to 4:00 PM on Friday and 8:00 AM to 11:00 PM on Saturday.

Refreshments, provided by the generosity of the exhibitors, will be available Friday, morning and afternoon, and Saturday morning in Kirkman Hall 107.

Registration will be in Gayle Hall Atrium (Thursday evening) and Kirkman Hall 107 (rest of the meeting).

Kirkman Hall 140 will be available for committee meetings starting Friday at 12:00 PM until the end of the conference.

Computers with internet access will be available for conference attendees in Kirkman Hall 123 during the conference hours.

Wireless internet access will be available.

Conference Parking Permits and maps will be available at the registration table.

Student Competitions

Student Integration Bee

THURSDAY, 6:30 – 9:30 PM

GAYLE HALL AUDITORIUM

Student Team Competition

FRIDAY, 8:30 – 11:00 AM

GAYLE HALL AUDITORIUM

Student Luncheon

FRIDAY, 11:30 – 12:30 PM

GAYLE HALL AUDITORIUM

Student Luncheon Speaker: **Bobbie Swan**

How I got to NASA and what the future holds

BIOGRAPHY: Ms Bobbie Swan is a 1984 graduate of McNeese State University where she earned a Bachelor of Science degree in Computer & Information Sciences. In January 1985, Ms Swan began her professional career at NASA Johnson Space Center (JSC) in the Mission Operations Directorate (MOD) as a Data Processing System / Navigation Crew Training Instructor. In 1989, Ms Swan accepted a position in the Orbiter Project Office / Space Shuttle Program as a Mission Evaluation Room Manager, leading a team of design engineers providing around-the-clock real-time support to the launch and flight control teams during missions. She served in this position for ten years, supporting approximately 67 Shuttle flights.

Recently, Ms Swan accepted the appointment of Manager, Portable Equipment and Pyrotechnics Office in the Constellation Program. She is a member of the NASA Engineering and Safety Center Human Space Flight Operations Team, past member of the Science Advisor Program, and the JSC Recruiting Team. Ms Swan has been honored for her accomplishments, and she has received numerous Superior Accomplishment Awards, Exceptional Achievement Awards, and Outstanding Performance Awards. She has received a Silver Snoopy Award, and early in her career, she was named the Flight Data and Evaluation Office Employee of the Year.

(Excerpted from Ms Swan's official NASA biographical profile.)

Section NExT and New Faculty Sessions

As long as space is available, Section NExT sessions are open to all.

Session I: *Get Involved in the MAA!*

FRIDAY, 8:00 – 9:00 AM

KIRKMAN HALL 140

SPEAKERS:

Michael Pearson, Exec. Assoc. Dir., Programs & Svcs., MAA (overview)

John Travis, LA/MS MAA Governor, Miss. College (overview)

Judith Covington, LSUS (national Project NExT)

Connie Campbell, Millsaps (national committees)

Session II: *Who are the Best Mathematics Teachers?*

FRIDAY, 9:15 – 10:15 AM

KIRKMAN HALL 140

SPEAKER:

Johnny Lott, Director, Center for Excellence in Teaching and Learning, Ole Miss; former President, NCTM

Session III: *Using Technology to Reach Your Students*

FRIDAY, 10:30 – 11:30 AM

KIRKMAN HALL 140

SPEAKERS:

Brian Camp, Louisiana Tech (WeBWork)

Jenna Carpenter, Louisiana Tech (ALEKS)

Opening Session

FRIDAY, 1:15 – 2:30 PM

BAKER AUDITORIUM

Welcome to McNeese State University

George Mead, Dean of the College of Science

Outstanding Teacher Address

Galen Turner, Louisiana Tech University

Special Session I

**Course Redesign in Freshmen Level Mathematics:
What is working, what is not at your institution!**

FRIDAY, 2:45 – 3:45 PM

KIRKMAN HALL 109

PANELISTS:

Darren Alcock, Coordinator of Freshman Math., McNeese State

Kathleen Lopez, Asst. Dept. Head, UL Lafayette

Bernd Schroder, Program Chair, Louisiana Tech

Sherill Dupree, Instructor, Nicholls State

Tim Hudson, Mathematics Dept. Head, SELU

Special Session II

A Conversation about K–12 Education in LA and MS

SATURDAY 8:30 – 9:30 AM

KIRKMAN HALL 109

MODERATORS: **Pat Jones** (UL Lafayette) & **Clifton Wingard** (Delta State)

DESCRIPTION: A round-table discussion focused on what is our role — as a community of mathematicians — not only in regard to preservice and inservice programs for teachers, but also in regard to the mathematical quality of the state-mandated standards, curricula, and tests which are now driving classroom instruction to an alarming extent.

Contributed Papers, session I

FRIDAY 2:45 – 4:40 PM

KIRKMAN HALL 111

- 2:45 **Bonnie Oppenheimer** *Pilot study of STEM images*
MISSISSIPPI U FOR WOMEN
- 3:05 **Mark Schlatter** *How to run an undergraduate research
project with no experience*
CENTENARY
- 3:25 **Roberta Yellott** *Why I cannot be a serious mathematician:
A tribute to Sidney Harris*
MCNEESE STATE
- 3:45 **Nola McDaniel** *Some thoughts on random selection*
MCNEESE STATE
- 4:05 **David Gurney** *Tests for randomness*
SELU
- 4:25 **John Osoinach** *Outwitting the lying oracle*
MILLSAPS COLLEGE
- 4:45 **Christy Sue Crouch** *The origins and development of fractional
calculus*
UL LAFAYETTE
-

Contributed Papers, session II

FRIDAY 2:45 – 4:40 PM

KIRKMAN HALL 115

- 2:45 **Bill Calbeck** *Solving $\bar{z} = f(z)$, where $f(z)$ is a rational
function*
LSU ALEXANDRIA
- 3:05 **Tiffany Milliern** *Polynomial functions and the mean value
theorem*
LSU ALEXANDRIA
- 3:25 **Faisal Kaleem** *An application of complex analysis in numer-
ical analysis*
UL MONROE
- 3:45 **Anne Vakarietis** *Embedding weakly regular rings in weakly
regular rings with identity*
UL LAFAYETTE
- 4:05 **John G. Mersch** *Pretabular Relevance Logics*
NORTHWESTERN STATE
- 4:25 **Julien Doucet** *Sets of endpoints of zigzags continua*
LSU ALEXANDRIA
-

Contributed Papers, session III

SATURDAY 8:10 – 9:45 AM

KIRKMAN HALL 111

- 8:10 **Rick Mabry** *Albrecht Dürer's approximate (but fabulous) tri-section of an angle*
LSU SHREVEPORT
- 8:30 **M. R. Khadivi** *A heretical and simple approach to trigonometry concepts*
JACKSON STATE
- 8:50 **Edgar Reyes** *When do the averages of a bounded sequence converge?*
SELU
- 9:10 **Syrous Marivani** *On the irrationality of $k^{1/t}$*
LSU ALEXANDRIA
- 9:30 **Karen Villarreal** *Elements of a mutually aposyndetic decomposition*
LSU ALEXANDRIA
-

Contributed Papers, session IV

SATURDAY 8:10 – 9:45 AM

KIRKMAN HALL 108

- 8:10 **Karen Aucoin** *An experiment with peer review in a transition course*
MCNEESE STATE
- 8:30 **Ben Rushing, Jr.** *Teaching technical mathematics with calculus using CAS calculator support*
NORTHWESTERN STATE
- 8:50 **Mary E. Reeves & Leigh Ann Meyers** *Geometer's sketchpad and preservice teachers*
NORTHWESTERN STATE
- 9:10 **Talmage James Reid** *PRS clickers in the classroom*
MISSISSIPPI
- 9:30 **Jithika Thomas** *Superb problem solving*
MCNEESE STATE
-

MAA Invited Speaker

SATURDAY, 10:00 – 11:00 AM

BAKER AUDITORIUM

Martha Siegel, MAA Secretary *Industrial Mathematics for Fun and Profit*

ABSTRACT: How do you catch a tax evader? How do you snare a criminal? How do you run an efficient courier service? Undergraduate student research teams tackle problems from government, business, and industrial sponsors in year-long projects that are both fun and profitable. The talk will present the basics of managing a program like the Applied Mathematics Laboratory and will highlight some of the most interesting and challenging projects from the past 25 years of its existence.

BIOGRAPHY: Dr Siegel received her BA in mathematics from Russell Sage College and her PhD in stochastic processes from the University of Rochester. Following her graduate studies, she held a postdoctoral fellowship at the School of Hygiene and Public Health at Johns Hopkins University, where she studied operations research and mental health. She lists among her interests mathematical models, applied probability, and college mathematics curriculum reform. Dr Siegel is a Professor of Mathematics at Towson University, where she has been teaching in the Department of Mathematics since 1971.

While at Towson, she has been recognized for her outstanding service to the university and her profession. She has been active in faculty governance at Towson University, and she has also been active in the University System of Maryland as a representative to the Council of University System Faculty, and has served this organization as chairperson twice. Dr Siegel has co-authored two books, *Finite Mathematics and Its Applications* and *Functioning in the Real World*. Martha Siegel has been quite active in the MAA. She served as editor of *Mathematics Magazine* from 1991 to 1996, and she has been on the Executive Committee since 1991. She was elected Secretary of the MAA in 1996 and is currently serving in this position.

Business Meeting

SATURDAY, 11:15 – 12:15 PM

BAKER AUDITORIUM

<i>Opening Comments</i>	Lenny Ornas
<i>Governor's Report</i>	John Travis
<i>Section NExT Report</i>	Jenna Carpenter
<i>Proceeding Committee Report</i>	Laura Sheppardson
<i>Treasurer's Report</i>	Judith Covington
<i>Outstanding Teaching Committe Report and Award</i>	Galen Turner
<i>Necrology Committee Report</i>	Clifton Wingard
<i>Resolutions Committee Report</i>	Kathleen Lopez
<i>Location and Nomination Committee Report</i>	Frank Serio
<i>Student Papers Committee Report</i>	Alex Scorpan
<i>Student Competition Report</i>	Vic Schneider
<i>Closing Comments</i>	Lenny Ornas

Special Thanks

Local Arrangements

Chair/Co-chair: **Lenny Ornas** and **Christine Gorton**

Contributed Papers: **Christine Gorton**

Dots Coordinator: **Becky Griffith**

Student Papers: **Alex Scorpan**

Exhibits/Book Sale: **Karen Aucoin** and **Bobbie Yellott**

Food: **Bill Denny**

Integration Bee: **Randy Wills** and **Tilak DeAlwis**

Meeting Website & Online Registration: **John Travis**

Program: **Christine Gorton**, **Lenny Ornas** and **Alex Scorpan**

Registration: **Bill Albrecht**

Student Team Competition: **Vic Schneider** and **Robert Doucette**

T-Shirts: **Colleen Couvillon** and **Alex Scorpan**

Special Thanks

The following groups helped support the conference:

College of Science, McNeese State University;

Department of Mathematics, Computer Science, and Statistics, McNeese State University;

Enrollment Information Center, McNeese State University;

McNeese Alumni Association;

Southwest Louisiana Convention and Visitors Bureau;

Cengage Learning and Kellie DeBroeck;

Pearson Education and Diana Baniak;

Houghton Mifflin and Blake Fisher;

McGraw-Hill Higher Education and Ann Severance;

Little Chenier.

Institutional Partners

The following institutions are current Institutional Partners of our Section. Funding from these partnerships helps support the Section's student activities.

Louisiana School for Math, Science, and the Arts;

Louisiana State University and A&M, Baton Rouge;

McNeese State University;

Mississippi College;

Mississippi State University;

Mississippi University for Women;

Northwestern State University of Louisiana;

Southern University and A&M College;

Tulane University;

University of Louisiana at Lafayette;

University of Mississippi.