

# Speaking of Science

We send Louisiana researchers into your classroom to talk about:

## Science, Technology, Engineering & Mathematics



Speaking of Science (SoS) speakers are counted among the State's finest teaching and research talent in the STEM disciplines. They tailor their presentations to their respective audiences and are available free of charge for presentations to groups of K-16 students, educators, parents, and general audiences throughout Louisiana. Speakers will travel to any city as their schedule allows. To find the most current list of presentations, please visit our website at <https://web.laregents.org/?p=390>.



### Program Objectives

- \* To spark the interest of students in the science, technology, engineering and math professions.
- \* To increase public awareness of exciting research and development in Louisiana.
- \* To showcase Louisiana's leading scientists and their cutting-edge research.

**To Schedule a Presentation:** Scheduling is easy! Just complete the short SoS Presentation Request Form on the last page of this packet and fax to (225) 342-3371, or for assistance, call Susan Jernigan at the Board of Regents at (225) 219-7173.

**Presentation Length:** Most presentations are designed for a one-hour session. However, a speaker may be able to adjust his or her presentation to meet the needs of the requesting organization. Please specify any time limits when scheduling a presentation.



Sponsored by the National Science Foundation and the Board of Regents'  
Louisiana Experimental Program to Stimulate Competitive Research





## Take a look at what SoS has to offer!

The presentations listed below are arranged by audience and subject area. Please contact our office for more information on each topic. Unless otherwise indicated, K-12 presentation topics are appropriate for all grade levels under which they are listed. **K-12 topics listed with an asterisk (\*) are also appropriate for presentations to parents, those listed with a plus sign (+) are also appropriate for presentations to K-12 educators and those listed with a number sign (#) are also appropriate for presentations to College Undergraduates and Faculty.**

To learn our Speakers' universities and titles, please see pages in the back of this brochure.





















- Dr. Allison** "Making the Future of Making Music" ✨  
"The Music of the Spheres: recent connections between Art and Science and Music" \*+ #
- Dr. Bagayoko** "The Scientific Method for All" (2<sup>nd</sup> – 5<sup>th</sup>)
- Dr. Beminiwattha** "How to Engage Students in STEM Activities: Practical Examples for parents and teachers of K-12 students" \*+ ✨
- Dr. Blake** "Let's make slime! Atoms, molecules and how they move" (New Orleans area only)
- Dr. Dua** "From Facebook to Cyber Warfare: The Triumph of Information and Data Mining" #  
"From Video gaming to Designing drugs: Pursuing a career in Computer Science and preparing for the next revolution" \*+ # ✨  
"Have you Done your computing Today? The Triumph of Computing as a Skill" \*+ #  
"The Advent of Facebook: A Boon or a Threat?" \*+ # ✨  
"The Pursuit of Scientific Research: The need and implications" \*+ #
- Dr. Hollerman** "Low and slow cooking: Understanding the physics of barbecue" +\*  
"Rockets and starships: An overview of astronomy and astrophysics in the early 21<sup>st</sup> century" \*+  
"Understanding wintergreen candy: A lifetime of making things glow in the dark" \*+  
"What is the role of physics in society?" \*+
- Dr. Karunatillake** "Counting planetary sand grains with computer vision" \*+ # ✨  
"A story of water on mars from maps of hydrogen and sulfur" \*+ # ✨
- Dr. Kinsland** "The Chicxulub Impact: The Collision That Killed the Dinosaurs" \*+ #  
"Think the Land is Flat Around Lafayette? Let's Look with Lasers!" \*+ #
- Dr. Lawrence** "Polymers and DNA: Discovering the World of Biomaterials" \*+
- Dr. Liu** "Mathematics Underlying Marvelous Engineering and Technologies" \*+ ✨
- Dr. Pesika** "Sticky materials inspired by gecko lizards" \*+
- Dr. Sidorovskaia** "Whale stories from the Gulf of Mexico" \*+

- Dr. Stringer** "Unique and Amazing Monumental Earthworks at Poverty Point World Heritage Site"\*+ (4<sup>th</sup> and up)  
 "Ancient Megatoothed Sharks from northeast Louisiana"\*+ (4<sup>th</sup> and up)  
 "T. rex: From Top to Bottom" (1<sup>st</sup> through 5<sup>th</sup>)  
 "Fossils Whales of North Louisiana"\*+ (3<sup>rd</sup> and up)
- Dr. Sun** "The beauty of bridges" 
- Dr. Yang** "High Entropy Alloy Development: From Computer Design to Real Product"\*+ #
- Dr. Yaukey** "Hurricanes of Louisiana"\*+ #   
 "Urban Birds of New Orleans"\*+ #   
 "Field Trips to Audubon Zoo or Jean Lafitte National Park in New Orleans" \*+ # 






## Science






- Dr. Adams** "Alchemy and the Birth of Modern Chemistry" #\* 
- Dr. Bagayoko** "Learning or Teaching Effective Problem-Solving" #  
 "The Versatility and Wonders of Physics" #  
 "Careers in Science and Engineering and the English and Mathematics it takes"
- Dr. Berminiwattha** "How to Engage Students in STEM Activities: Practical Examples for parents and teachers of K-12 students"\*+   
 "Minutes Physics Q&A: show a video and followed by Q&A" 
- Dr. Bishop** "The ABC's of DNA"
- Dr. Blake** "Let's make slime! Atoms, molecules and how they move" (New Orleans area only)
- Dr. Crother** "Snakes in Film: Farces and Facts" \*+ #   
 "What's in a Name? The Topsy Turvy World of Scientific Names" \*+ # 
- Dr. Dobie** "Myths and Memories Surrounding Motion Sickness"  
 "Preventing Seasickness and Other Forms of Motion Discomfort"\*+
- Dr. Dua** "From Video gaming to Designing drugs: Pursuing a career in Computer Science and preparing for the next revolution"\*+ #   
 "Have you Done your computing Today? The Triumph of Computing as a Skill"\*+ # 
- Dr. Ellwood** "A Global Perspective on Modern Developments in Stratigraphy: Redefining Geologic time"\*+  
 "Our Spectacular National Park Areas and their Geology"\*+
- Dr. Genov** "The Magic of Science or How to Make the Harry Potter Invisibility Cloak"+ #
- Dr. Ghose-Hajra** "Reduce, Reuse, and Recycle towards a Sustainable Future"\*+ #  
 "Restoring Coastal Louisiana – Benefits and Challenges" \*+ #


- Dr. Gossett** "Believe It or Not: Plants Also Suffer From Stress"\*+
- Dr. Hollerman** "Low and slow cooking: Understanding the physics of barbecue" +\*  
 "What is the role of physics in society?"\*+  
 "Just exactly what does it mean to be physics major?"  
 "A scientist's view of developing patents and intellectual property"  
 "Rockets and starships: An overview of astronomy and astrophysics in the early 21<sup>st</sup> century"\*+  
 "Understanding wintergreen candy: A lifetime of making things glow in the dark"\*+
- Dr. Joshi** "Fatigue of Aircraft Materials"+ 
- Dr. Karunatillake** "Counting planetary sand grains with computer vision"\*+#   
 "A story of water on mars from maps of hydrogen and sulfur"\*+#   
 "Living science fiction on Mars and beyond"\*+  
 "Discoveries unimagined by 2001: A Space Odyssey"\*+  
 "Discovering Mars"\*+  
 "A story of water on Mars from maps of hydrogen and sulfur"\*+
- Dr. Kinsland** "The Chicxulub Impact: The Collision That Killed the Dinosaurs"\*+
- Dr. Kuroda** "The Poor's man battery, a penny's worth hands-on experiment" 
- Dr. Lawrence** "Polymers and DNA: Discovering the World of Biomaterials"\*+
- Dr. McCarthy** "Fusion Energy: Creating a Star on Earth"\*+
- Dr. Merchant** "The American Alligator: From Marsh to Medicine"\*+  
 "Color Change in Crocodile: Adaptation to environment"
- Dr. Mitchell** "From Silly Putty to Superconductors: Careers in Materials Science and Engineering"\*+#
- Dr. Richter** "4.6 billion years: a brief history of Earth" +\*#  
 "Exploring the Earth's oceans with a drill ship"+\* #  
 "The Geology of Louisiana"+\* #  
 "What's up with global warming?" +\* #
- Dr. Sidorovskaia** "Whale stories from the Gulf of Mexico"\*+
- Dr. Sridhar** "Chemists as investigators in industry and environmental organizations" +\*#   
 "Role of Different Branches of Science in Drug Discovery" +\*#   
 "Protein Kinases and Human Diseases"\*+# 
- Dr. Stringer** "Unique and Amazing Monumental Earthworks at Poverty Point World Heritage Site"\*+  
 "Ancient Megatoothed Sharks from northeast Louisiana"\*+  
 "Fossils Whales of North Louisiana"\*+  
 "What is a Fish Otolith and How is it Used in Science?"\*+
- Dr. Sun** "The beauty of bridges" 
- Dr. Yaukey** "Hurricanes of Louisiana"   
 "Urban Birds of New Orleans"   
 "Field Trips to Audubon Zoo or Jean Lafitte National Park in New Orleans" 

# Technology & Computers






- Dr. Allison** "Making the Future of Making Music" \*+##   
"The Music of the Spheres: recent connections between Art and Science and Music" \*+##
- Dr. Bishop** "Supercomputing: Anytime, Anyplace" \*+##  
"So Many Computers So Little Time: How to use 1,000's of Computers at Once"  
"Little Fe and Me: Demonstrations with a portable parallel computer"
- Dr. Dua** "From Facebook to Cyber Warfare: The Triumph of Information and Data Mining"\*+ #  
"Data Mining for Cybersecurity Applications: Opportunities and Challenges" #  
"From Video gaming to Designing drugs: Pursuing a career in Computer Science and preparing for the next revolution"\*+##   
"Have you Done your computing Today? The Triumph of Computing as a Skill"\*+##   
"What does your Genetic Profile and Facebook Profile have in common: Personalized Data Mining for Knowledge Discovery" #  
"Information Fusion and Data Mining Paradigms for the Cyber Domain: Computational Frameworks and Algorithmic Challenges" #  
"From Bio-informatics to Cyber-Informatics: *The Tsunami of Data and the Discovery of Knowledge*" #  
"The Advent of Facebook: A Boon or a Threat?" \*+##  
"The Pursuit of Scientific Research: The need and implications" \*+##
- Dr. Karunatillake** "Counting planetary sand grains with computer vision"\*+ #
- Dr. Tims** "Cyber Discovery – a multidisciplinary approach to training cyber citizens"\*+ #  
"A Vehicle to Drive the Next Generation"
- Dr. Yang** "High Entropy Alloy Development: from Computer Design to Real Product" #

# Engineering

- Dr. Bagayoko** "Careers in Science and Engineering and the English and Mathematics it takes"
- Dr. Genov** "The Magic of Science or How to Make the Harry Potter Invisibility Cloak"+
- Dr. Ghose-Hajra** "What Does a Civil Engineer Do?" \*+ #  
"Historic Civil Engineering Structures in Louisiana" \*+##
- Dr. Goloverda** "Nanomaterials: Fun and Use?" +
- Dr. Ibekwe** "Emerging Engineering Materials for Space Application"   
"Revolutionizing Technology through Smart Materials"   
"3-D Printing – The future of manufacturing"   
"Sustainable Method of Removing Fluoride from Contaminated Borehole Water" 
- Dr. Joshi** "Fatigue of Aircraft Materials"+ 
- Dr. Mensah** "Increasing the Efficiency & Power Generating Capacity of Gas Turbines Using Ceramic Coatings"  
"History of Selective Laser Sintering Process and Materials used in Additive Manufacturing"
- Dr. Mitchell** "From Silly Putty to Superconductors: Careers in Materials Science and Engineering"\*+##
- Dr. Moore** "Making Phase Changes Work for Us!" \*+##
- Dr. Pesika** "Sticky materials inspired by gecko lizards"\*+##

- Dr. Sun** "The beauty of bridges" 
- Dr. Tims** "Cyber Discovery – a multidisciplinary approach to training cyber citizens"\*+  
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## Mathematics











- Dr. Allison** "Making the Future of Making Music"   
"The Music of the Spheres: recent connections between Arts and Science and Music" \*+#
- Dr. Bagayoko** "Careers in Science and Engineering and the English and Mathematics it takes"  
"Learning or Teaching Effective Problem-Solving"  
"The Versatility and Wonders of Physics"
- Dr. Birkenmeier** "Careers in Mathematics and Mathematical Research" 
- Dr. Dua** "From Video gaming to Designing drugs: Pursuing a career in Computer Science and preparing for the next revolution"\*+#   
"Have you Done your computing Today? The Triumph of Computing as a Skill"\*+# 
- Dr. Liu** "Mathematics Underlying Marvelous Engineering and Technologies" 
- Dr. Marx** "A Gentle Introduction to Statistics"\*  
"A fun and light introduction to statistics with real world applications"\*
- Dr. Yang** "High Entropy Alloy Development: from Computer Design to Real Product"









## Science






- Dr. Adams** "Alchemy and the Birth of Modern Chemistry" #\* 🌟
- Dr. Bagayoko** "Careers in Science and Engineering and the English and Mathematics it takes"  
"Learning or Teaching Effective Problem-Solving"  
"The Versatility and Wonders of Physics"  
"Ab-initio, Predictive Calculations of Elect tunic and Related Properties of Materials"
- Dr. Beminiwattha** "How to Engage Students in STEM Activities: Practical Examples for parents and teachers of K-12 students" \*+ 🌟  
"Minutes Physics Q&A: show a video and followed by Q&A" 🌟
- Dr. Bishop** "The ABC's of DNA"
- Dr. Cao** "Let's Measure Trees "Can You Guess How Fast Trees Grow?"
- Dr. Crother** "Snakes in Film: Farces and Facts" \*+# 🌟  
"What's in a Name? The Topsy Turvy World of Scientific Names" \*+# 🌟
- Dr. Dobie** "Myths and Memories Surrounding Motion Sickness"  
"Preventing Seasickness and Other Forms of Motion Discomfort"\*+
- Dr. Ellis** "Oysters: good news – bad news"\*+# 🌟  
"Earth is a microbial world with a few contaminating organisms"\*+# 🌟
- Dr. Ellwood** "Our Spectacular National Park Areas and their Geology"\*+  
"A Global Perspective on Modern Developments in Stratigraphy: Redefining Geologic time"\*+
- Dr. Fekih** "Electrical Engineering: Past, present, and future"  
"Fault tolerant control design: current advances, challenges and opportunities"  
"If you think graduate school is expensive think again: Graduate Fellowship Programs"
- Dr. Ferguson** "Assisted Reproductive Technologies in Farm Animals and Humans"  
"Biotechnology in Animal Production and Human Medicine"  
"Stress in Farm Animals"
- Dr. Genov** "The Magic of Science or How to Make the Harry Potter Invisibility Cloak"+
- Dr. Gossett** "Believe It or Not: Plants Also Suffer From Stress"\*+

- Dr. Hollerman** "Low and slow cooking: Understanding the physics of barbecue" +\*  
 "What is the role of physics in society?"\*+  
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 "A scientist's view of developing patents and intellectual property"  
 "Rockets and starships: An overview of astronomy and astrophysics in the early 21<sup>st</sup> century"\*+  
 "Understanding wintergreen candy: A lifetime of making things glow in the dark"\*+
- Dr. Holliday** "Food Science and its Impact in Today's World"\*#   
 "3D Printing of Foods: Moving Beyond Plastics" "\*# 
- Dr. Joshi** "Fatigue of Aircraft Materials"+ 
- Dr. Karunatillake** "Counting planetary sand grains with computer vision"\*+#   
 "A story of water on mars from maps of hydrogen and sulfur"\*+#   
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 "A story of water on Mars from maps of hydrogen and sulfur"\*+
- Dr. Khosravi** "Autonomous Humanoid Robot for Security and Mapping"\*+  
 "Improving Agriculture with advance Technology"\*+
- Dr. Kinsland** "The Chicxulub Impact: The Collision That Killed the Dinosaurs"\*+  
 "Think the Land is Flat Around Lafayette? Let's Look with Lasers!" \*+
- Dr. Kuroda** "The Poor's man battery, a penny's worth hands-on experiment" 
- Dr. LiCata** "HIV/AIDS: Science and World Politics"\*+  
 "Entertaining Science: Using Humor and Performance to Communicate Science"\*+  
 "LSU in Antarctica: Science, Art, and Exploration"\*+  
 "Molecular Mechanisms for Surviving a Nuclear War: Radiation Resistant Organisms"\*+  
 "Astrobiology at LSU: Extraterrestrial Life, Living in Space and NASA's Vomit Comet "  
 "Science in Plays and Movies: Science Fact and Science Fiction"
- Dr. Malkinski** "Micro-origami and nano-origami"+
- Dr. Marier** "Medical Ethics: Framework and Case Studies"  
 "Allocation of Resources in Critical Care"
- Dr. McCarthy** "Fusion Energy – Creating a Star on Earth"\*+# 
- Dr. Merchant** "The American Alligator: From Marsh to Medicine"\*+  
 "Color Change in Crocodile: Adaptation to environment"
- Dr. Mitchell** "From Silly Putty to Superconductors: Careers in Materials Science and Engineering"\*+#
- Dr. Richter** "4.6 billion years: a brief history of Earth" +\*  
 "Exploring the Earth's oceans with a drill ship"+\*  
 "The Geology of Louisiana"+\*  
 "What's up with global warming?" +\*
- Dr. Seetala** "Material Characterization Using Antimatter Positron Annihilation"
- Dr. Sidorovskaia** "Exploring Oceans with Sound"\*+
- Dr. Sridhar** "Role of Different Branches of Science in Drug Discovery"\*+#   
 "Chemists as investigators in industry and environmental organizations" \*+   
 "Protein Kinases and Human Diseases" \*+ 



- Dr. Stringer** "Unique and Amazing Monumental Earthworks at Poverty Point World Heritage Site"\*+  
 "Ancient Megatoothed Sharks from northeast Louisiana"\*+  
 "Fossils Whales of North Louisiana"\*+  
 "What is a Fish Otolith and How is it Used in Science?"\*+
- Dr. Tarr** "How Sunlight Affects Oil Spills"
- Dr. Weaver** "From crude oil to computer cases: How chemistry creates the things we use every day" #  
 "Chemistry of Artist's Colors" # 
- Dr. Weiss** "New Technologies for 21<sup>st</sup> Century Engineering Challenges"\*+
- Dr. Wilson** "Grand Challenge Scholar Program: Student nanotechnology research opportunities to get a great admission offer from Universities"
- Dr. Yaukey** "Hurricanes of Louisiana"   
 "Urban Birds of New Orleans"   
 "Field Trips to Audubon Zoo or Jean Lafitte National Park in New Orleans" \*+# 
- Dr. Yu** "Is a career in dentistry for me?"

## Technology & Computers

- Dr. Allison** "Making the Future of Making Music"   
 "The Music of the Spheres: recent connections between Art and Science and Music" \*+#
- Dr. Bishop** "Supercomputing: Anytime, Anyplace"
- Dr. Dai** "Mathematical modeling and computation for obtaining temperature distribution in nanoscale heat conduction"  
 "Mathematical modeling and numerical simulation for thermal analysis in a skin structure with embedded vasculature, tumor, and gold nanoshells"   
 "Numerical simulation for particle moving and soliton traveling in quantum mechanics"
- Dr. Derosa** "Computer modeling and the scientific method, or advancing science and technology one byte at a time"+ 
- Dr. Dua** "Adventures in Computer Science: Above and Beyond Game Programming and App Development"  
 "From Biology to Bioinformatics: The story of how Computer Science is changing the face of Biological Discovery"  
 "From Video gaming to Designing drugs: Pursuing a career in Computer Science and preparing for the next revolution"   
 "Have you Done your Computing Today? The Triumph of Computing as a Skill"   
 "Student Interdisciplinary Computing Research: Motivation and Opportunities"  
 "Students who listen to hard rock and play soccer excel in Math but perform poorly in Chemistry: Discovering surprising Associative Rules and more using Data Mining"  
 "The Advent of Facebook: A Boon or a Threat?"  
 "The Pursuit of Scientific Research: The need and implications"  
 "What more can your data do for you? Discovering Gold from your data using Data Mining"
- Dr. Ghose-Hajra** "Reduce, Reuse, and Recycle towards a Sustainable Future"\*+  
 "Restoring Coastal Louisiana – Benefits and Challenges"

- Dr. Karunatillake** "Counting planetary sand grains with computer vision"\*+  
**Dr. Khosravi** "Autonomous Humanoid Robotic for Security and Mapping"\*+  
 "Improving Agriculture with Advance Technology"\*+  
**Dr. Mhire** "Cyber-Space, Cyber-Technology and Cyber-Citizenship: Old Issues Meet New Technology in the 21<sup>st</sup> Century"\*+  
 "Do I Really Know What I Think I Know? Thinking Critically About Issues in Cyber-Space"\*+  
**Dr. Moreno** "Opportunities in Computational Materials Science"\*+  
**Dr. Tims** "Cyber Discovery – a multidisciplinary approach to training cyber citizens"\*+  
**Dr. Yang** "High Entropy Alloy Development: from Computer Design to Real Product"

## **Engineering**

- Dr. Bagayoko** "Careers in Science and Engineering and the English and Mathematics it takes"  
**Dr. Fekih** "Electrical Engineering: Past, present and future"  
 "Fault tolerant control design: current advances, challenges and opportunities"  
 "If you think graduate school is expensive think again: Graduate Fellowship Programs"  
**Dr. Ghose-Hajra** "What Does a Civil Engineer Do?"  
 "Historic Civil Engineering Structures in Louisiana"  
**Dr. Goloverda** "Nanomaterials: Fun and Use"+  
**Dr. Hollerman** "Low and slow cooking: Understanding the physics of barbecue" +\*  
 "What is the role of physics in society?"\*+  
 "Just exactly what does it mean to be physics major?"  
 "A scientist's view of developing patents and intellectual property"  
 "Rockets and starships: An overview of astronomy and astrophysics in the early 21<sup>st</sup> century"\*+  
 "Understanding wintergreen candy: A lifetime of making things glow in the dark"\*+  
**Dr. Holliday** "Food Science and its Impact in Today's World"\*#   
 "3D Printing of Foods: Moving Beyond Plastics" ""\*#   
**Dr. Ibekwe** "Emerging Engineering Materials for Space Application"  
 "Revolutionizing Technology through Smart Materials"  
 "3-D Printing – The future of manufacturing"  
 "Sustainable Method of Removing Fluoride from Contaminated Borehole Water"  
**Dr. Joshi** "Fatigue of Aircraft Materials"\*+   
**Dr. Kolesnichenko** "Nanotechnology: its origins and benefits for our life"  
**Dr. Lawrence** "Polymers and DNA: Discovering the World of Biomaterials" \*+  
**Dr. Li** "Biomimetic Self-Healing Composite Materials"  
**Dr. Lvov** "Nanotechnology based on natural materials: from biomimetic for cyborg cells to fly ash concrete!"  
**Dr. Meng** "Making things small"\*+ #  
**Dr. Mensah** "Increasing the Efficiency & Power Generating Capacity of Gas Turbines Using Ceramic Coatings"  
 "History of Selective Laser Sintering Process and Materials used in Additive Manufacturing"

- Dr. Mitchell** "From Silly Putty to Superconductors: Careers in Materials Science and Engineering"\*+ #
- Dr. Moore** "Making Phase Changes Work for Us!"\*+ #
- Dr. Nikitopoulos** "Small Things Make a Big Contributions to Medicine"\*+ #
- Dr. Pesika** "Sticky materials inspired by gecko lizards"\*+ #
- Dr. Plummer** "Materials for the 21<sup>st</sup> Century: A Revolutionary – Not an Evolutionary Approach"\*
- Dr. Sun** "The beauty of bridges" 🌟
- Dr. Tims** "A Vehicle to Drive the Next Generation"\*+ #
- Dr. Wang** "Small Things Make Big Contributions to Medicine"
- Dr. Weiss** "New Technologies for 21<sup>st</sup> Century Engineering Challenges"\*+ #
- Dr. Wilson** "Grand Challenge Scholar Program: Student nanotechnology research opportunities to get a great admission offer from Universities"
- Dr. Yang** "High Entropy Alloy Development: from Computer Design to Real Product" \*+ #

## Mathematics

- Dr. Allison** "Making the Future of Music" 🌟  
"The Music of the Spheres: recent connections between Art and Science and Music" \*+ #
- Dr. Bagayoko** "Careers in Science and Engineering and the English and Mathematics it takes"
- Dr. Beslin** "Pi For Dessert: A Mathematics Sampler"
- Dr. Birkenmeier** "Careers in Mathematics and Mathematical Research"\*+ #  
"Applications of Abstract Algebra"\*+ #
- Dr. Cao** "Applying statistics to solve everyday problems" 🌟  
"Let's Measure Trees"+ #  
"Can You Guess How Fast Trees Grow?" + #  
"Applying math in estimating tree height"+ #  
"Tough equations? Solve them easily using numerical methods" + #
- Dr. Dai** Mathematical modeling and numerical simulation for thermal analysis in a skin structure with embedded vasculature, tumor, and gold nanoshells" # 🌟  
"Mathematical modeling and computation for obtaining temperature distribution in nanoscale heat conduction" # 🌟  
"Numerical simulation for particle moving and soliton traveling in quantum mechanics" # 🌟
- Dr. Kostrov** "Recurrence Sequences"\*+ #
- Dr. Liu** "Numerical Simulation and Computational Mathematics in Engineering and Applications" 🌟  
"Mathematics Underlying Marvelous Engineering and Technologies" \*+ 🌟
- Dr. Marx** "A Gentle Introduction to Statistics"\*  
"A fun and light introduction to statistics with real world applications"\*
- Dr. Sidorovskaia** "Exploring Oceans with Sound"\*+ #



# K-12 Parents & Educators

The following topics are appropriate for K-12 parents (\*) and educators (+):  
For more presentations for this group, look throughout the brochure for the \* and +'s.

- Dr. Allison** Computation Arts: Integrating the Arts and STEM Creatively”
- Dr. Bagayoko** “Promoting Academic Excellence by Design”  
“The Ways and Means of Academic Excellence for All Passing Standardized Tests”  
“Educational Reforms from A to Z”
- Dr. Beminiwattha** “How to Engage Students in STEM Activities: Practical Examples for parents and teachers of K-12 students”\*+ ✨
- Dr. Crother** “The Origin of Species: What did Charles Darwin Say?”+ # ✨
- Dr. Diack** “Integrating Instructional Multimedia Repository for teaching 21<sup>st</sup> Century skills”+  
“Best Practices for online Course Design and Delivery”+
- Dr. Karunatillake** “Effective team covenants at the vanguard of planetary science”  
“Replacing team hierarchy with vision, mission, and objectives”  
“Preserving productivity in a geographically and temporally distributed workplace”  
“Mars research as a case study in communicating effectively across diverse audiences”
- Dr. Marier** “End of Life Decision Making: A Summary of Advance Directives”  
“Informed Consent: Elements and Scope”
- Dr. Mhire** “Cyber-Space, Cyber-Technology and Cyber-Citizenship: Old Issues Meet New Technology in the 21<sup>st</sup> Century”\*+  
“Do I Really Know What I Think I Know? Thinking Critically About Issues in Cyber-Space”\*+
- Dr. Plaisance** “Sweaty Palms and All – A Discussion of Mathematics Anxiety”+
- Dr. Sidorovskaia** “Assessment of environmental impact of industrial operations in the Northern Gulf of Mexico by acoustic methods”\*+
- Dr. Sridhar** “Protein Kinases and Human Diseases”

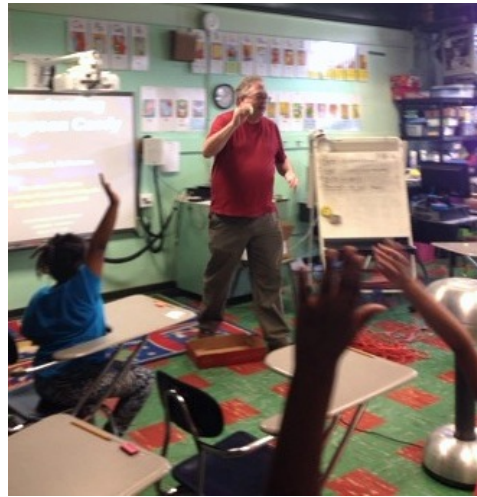
# College Undergraduates & Faculty

For more presentations in this group, look for a ‘#’ throughout the brochure.

- Dr. Bagayoko** “The Ways and Means for Academic Excellence for All; Passing Standardized Tests”
- Dr. Beminiwattha** “Golden Lessons I learned as a Physics PhD Student” \*+ 
- Dr. Butler** “3D+X-ray Imaging of Plastics, Fire, & Feathers: Looking at the data with giant computers and an iPad”
- Dr. Crother** “The Origin of Species: What did Charles Darwin Say?” \*+ 
- Dr. Diack** “Integrating Instructional Multimedia Repository for teaching 21<sup>st</sup> Century skills”  
“Best Practices for online Course Design and Delivery”  
“Current Practices and Strategies for Delivering Science Laboratories Online”
- Dr. Fekih** “If you think graduate school is expensive think again: Graduate Fellowship Programs”
- Dr. Marier** “End of Life Decision Making: A Summary of Advance Directives”  
“Informed Consent: Elements and Scope”
- Dr. Plaisance** “Sweaty Palms and All – A Discussion of Mathematics Anxiety”
- Dr. Seetala** “Material Characterization Using Antimatter Positron Annihilation”
- Dr. Sidorovskaia** “Assessment of environmental impact of industrial operations in the Northern Gulf of Mexico by acoustic methods” \*+
- Dr. Tarr** “How Sunlight Affects Oil Spills”

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# Speakers

<p><b>Dr. Brian Adams</b>  <i>University of Holy Cross</i>  Assistant Professor</p>	<p><b>Dr. Jesse Allison</b>  <i>Louisiana State University</i>  Assistant Professor of Experimental Music &amp; Digital Media</p>
<p><b>Dr. Diola Bagayoko</b>  <i>Southern University – Baton Rouge</i>  Distinguished Professor of Physics; Director, The Timbuktu Academy</p>	<p><b>Dr. Rakitha Beminiwattha</b>  <i>Louisiana Tech University</i>  Assistant Professor</p>
<p><b>Dr. Scott Beslin</b>  <i>Nicholls State University</i>  Professor of Mathematics and Department Head of Mathematics and Computer Science</p>	<p><b>Dr. Gary F. Birkenmeier</b>  <i>University of Louisiana at Lafayette</i>  Professor</p>
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<p><b>Dr. Pedro Derosa</b>  <i>Louisiana Tech University &amp; Grambling State University</i>  Associate Professor</p>	<p><b>Dr. Moustapha Diack</b>  <i>Southern University – Baton Rouge</i>  Associate Professor</p>
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<p><b>Dr. Natalia Sidorovskaia</b>  <i>University of Louisiana at Lafayette</i>  Professor, Coca-Cola/BORSF Endowed Professor of Physics and Chairperson</p>	<p><b>Dr. Jayalakshmi Sridhar</b>  <i>Xavier University</i>  Assistant Professor</p>
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<p><b>Dr. Shizhong Yang</b>  <i>Southern University – Baton Rouge</i>  Assistant Professor</p>	<p><b>Dr. Peter Yaukey</b>  <i>University of Holy Cross</i>  Professor of Biology</p>
<p><b>Dr. Alike Yu</b>  <i>Louisiana State University School of Dentistry</i>  Assistant Professor</p>	

# 2018 Speaking of Science

## Presentation Request Form

**Requesting Organization/Group:** \_\_\_\_\_

**Contact:** \_\_\_\_\_ **Email:** \_\_\_\_\_

**Physical Address:** \_\_\_\_\_

**Telephone:** \_\_\_\_\_ **Fax:** \_\_\_\_\_

**Type of Meeting:** \_\_\_\_\_ **Anticipated Audience (#):** \_\_\_\_\_

**Target Audience:**

\_\_\_\_\_ **K-12 Students: Grade(s)** \_\_\_\_\_ **Discipline:** \_\_\_\_\_

\_\_\_\_\_ **Teachers/Faculty: Grade/subject taught** \_\_\_\_\_

\_\_\_\_\_ **General Public**

\_\_\_\_\_ **Other: Explain:** \_\_\_\_\_

**Dates/Times Speaker Requested (please provide several available dates and times):**

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**Speaker Choice or Topic Requested (please use a separate request form for additional requests):**

**First Choice:** \_\_\_\_\_

**Second Choice:** \_\_\_\_\_

**Location of Presentation (if different from address above):**

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Please return this form to: Attn: SoS Program, (225) 342-3371 (fax) or P.O. Box 3677, Baton Rouge, LA 70821-3677 (mail) or email it to [susan.jernigan@la.gov](mailto:susan.jernigan@la.gov). For questions about SoS, please call (225) 219-7173.