
Meetings & Conferences of the AMS

IMPORTANT INFORMATION REGARDING MEETINGS PROGRAMS: AMS Sectional Meeting programs do not appear in the print version of the *Notices*. However, comprehensive and continually updated meeting and program information with links to the abstract for each talk can be found on the AMS website. See <http://www.ams.org/meetings/>. Final programs for Sectional Meetings will be archived on the AMS website accessible from the stated URL and in an electronic issue of the *Notices* as noted below for each meeting.

Waco, Texas

Baylor University

October 16–18, 2009

Friday – Sunday

Meeting #1051

Central Section

Associate secretary: Susan J. Friedlander

Announcement issue of *Notices*: August 2009

Program first available on AMS website: September 3, 2009

Program issue of electronic *Notices*: October 2009

Issue of *Abstracts*: Volume 30, Issue 4

Deadlines

For organizers: Expired

For consideration of contributed papers in Special Sessions: Expired

For abstracts: August 25, 2009

The scientific information listed below may be dated. For the latest information, see www.ams.org/amsmtgs/sectional.html.

Invited Addresses

David Ben-Zvi, University of Texas at Austin, *Title to be announced.*

Alexander A. Kiselev, University of Wisconsin, *Title to be announced.*

Michael C. Reed, Duke University, *Title to be announced.*

Igor Rodnianski, Princeton University, *Title to be announced.*

Special Sessions

Applicable Algebraic Geometry (Code: SS 12A), **Luis David Garcia-Puente**, Sam Houston State University, and **Frank Sotille**, Texas A&M University.

Commutative Algebra: Module and Ideal Theory (Code: SS 4A), **Lars W. Christensen**, Texas Tech University, **Louiza Fouli**, University of Texas at Austin, and **David Jorgensen**, University of Texas at Arlington.

Contemporary Complex and Special Function Theory (Code: SS 14A), **Roger W. Barnard** and **Kent Pearce**, Texas Tech University, **Kendall Richards**, Southwestern University, and **Alexander Solynin** and **Brock Williams**, Texas Tech University.

Dynamic Equations on Time Scales: Analysis and Applications (Code: SS 1A), **John M. Davis**, **Ian A. Gravagne**, and **Robert J. Marks**, Baylor University.

Formations of Singularities in Geometric Flows (Code: SS 15A), **Maria-Cristina Caputo**, University of Texas at Austin, and **Natasa Sesum**, Columbia University.

Fusion Categories and Applications (Code: SS 7A), **Deepak Naidu** and **Eric Rowell**, Texas A&M University.

Global Analysis on Homogeneous Spaces (Code: SS 13A), **Ruth Gornett**, University of Texas at Arlington, and **Ken Richardson**, Texas Christian University.

Harmonic Analysis and Partial Differential Equations (Code: SS 8A), **Susan Friedlander**, University of Southern California, **Natasa Pavlovic**, University of Texas at Austin, and **Nikolaos Tzirakis**, University of Illinois at Urbana-Champaign.

Interdisciplinary Session on Stochastic Partial Differential Equations (Code: SS 11A), **M. Chekroun**, ENS-Paris and University of California Los Angeles, and **Shouhong Wang** and **Nathan Glatt-Holtz**, Indiana University.

Lie Groups, Lie Algebras, and Representations (Code: SS 6A), **Markus Hunziker**, **Mark Sepanski**, and **Ronald Stanke**, Baylor University.

Mathematical Aspects of Spectral Problems Related to Physics (Code: SS 10A), **Klaus Kirsten**, Baylor University, **Gregory Berkolaiko** and **Stephen Fulling**, Texas A&M University, **Jon Harrison**, Baylor University, and **Peter Kuchment**, Texas A&M University.

Mathematical Models of Neuronal and Metabolic Mechanisms (Code: SS 3A), **Janet Best**, Ohio State University, and **Michael Reed**, Duke University.

Numerical Solutions of Singular or Perturbed Partial Differential Equation Problems with Applications (Code: SS 2A), **Peter Moore**, Southern Methodist University, and **Qin Sheng**, Baylor University.

Recent Developments on Turbulence (Code: SS 9A), **Eleftherios Gkioulekas**, University of Texas-Pan American, and **Michael Jolly**, Indiana University.

The Topology of Continua (Code: SS 16A), **David Ryden**, Baylor University, **Chris Mouron**, Rhodes College, and **Sergio Macias**, Universidad Nacional Autonoma de Mexico.

Topological Methods for Boundary Value Problems for Ordinary Differential Equations (Code: SS 5A), **Richard Avery**, Dakota State University, **Paul W. Eloe**, University of Dayton, and **Johnny Henderson**, Baylor University.

Accommodations

Participants should make their own arrangements directly with the hotel of their choice and state that they are with the "Baylor AMS Group". The AMS is not responsible for rate changes or for the quality of the accommodations.

Clarion Hotel Waco, 801 South 4th Street, Waco, TX 76706; Tel: 254-757-2000, Fax: 254-757-1110. Rates start at US\$89 per night with breakfast. Free airport shuttle.

Court Yard by Marriott Waco, 101 Washington Avenue, Waco, Texas 76701; Tel: 254-752-8686, Fax: 254-752-1011. Rates start at US\$104 per night. The hotel offers free shuttle service to Baylor as well as the airport.

Hilton Waco, 113 South University Parks Drive, Waco, Texas, 76701-2241; Tel: 254-754-8484 Fax: 254-752-2214. Rates start at US\$119 per night. This hotel is located approximately one mile from the campus. The hotel offers free shuttle service to Baylor as well as the airport.

Judge Baylor House Bed and Breakfast, 908 Speight Street, Waco, Texas 76706; Tel: 254-756-0273, Toll Free 1-888-JBAYLOR, Fax 254-756-0711; Rates start at US\$82 per night with breakfast. The hotel offers free shuttle service to Baylor as well as the airport.

Residence Inn by Marriott, 501 University Parks Drive, Waco, Texas 76706; Tel: 254-714-1386 Fax: 254-714-1386. Rates start at US\$99.99 per night with breakfast. The hotel offers free shuttle service to Baylor as well as the airport.

Food Service

For a list of restaurants that are of varying distances to Baylor University, please see the restaurant guide

at <http://www.baylor.edu/content/services/document.php/84074.pdf>.

Local Information

All the talks will take place in the Baylor Science Building (BSB). A campus map is available at <http://www.baylor.edu/map>. The BSB appears as the "three-fingered" building near the corner of University Parks and Bagby Avenues.

Computer Access

Participants will have access to computers located in the atrium of the Baylor Science Building.

Mayborn Museum Complex/Strecker Museum

During the meeting, free admission to the Strecker Museum will be granted to participants when they show their registration badge. <http://www.maybornmuseum.com>.

Please visit the website maintained by the Baylor Department of Mathematics for more local information at: <http://www.baylor.edu/math/> and <http://www.baylor.edu/math/index.php?id=63149>. Additional information about Waco attractions can be found at the website maintained by the Waco Convention & Visitors Bureau at <http://www.wacocvb.com>.

Other Activities

Book Sales: Stop by the on-site AMS Bookstore and review the newest titles from the AMS, enjoy up to 25% off all AMS publications, or take home an AMS t-shirt! Complimentary coffee will be served courtesy of AMS Membership Services. The AMS Book Exhibit will be located in the atrium of the BSB.

AMS Editorial Activity: An acquisitions editor from the AMS book program will be present to speak with prospective authors. If you have a book project that you would like to discuss with the AMS, please stop by the book exhibit.

Parking

Baylor will be on Fall Break during the meeting so there will be ample free parking near the Baylor Science Building. Please refer to the campus map at <http://www.baylor.edu/map>.

Registration and Meeting Information

The registration desk will be located in the atrium of the Baylor Science Building (BSB) and will be open from noon to 4:00 p.m. on Friday and 7:30 a.m. to 4:00 p.m. on Saturday; it will not be open Sunday, October 18. All talks will take place in the BSB.

Registration fees: (payable on-site only) US\$40 for AMS or CMS members; US\$60 for nonmembers; US\$5 for students, unemployed mathematicians, and emeritus members. Fees are payable by cash, check, VISA, MasterCard, Discover, or American Express.

Social Event

All participants are invited to a reception hosted by the department of mathematics at the Hilton (one of the recommended conference hotels), located at 113 South University Parks Drive, on Saturday evening October 17,

2009, from 6:30 p.m. to 8:30 p.m. There will be light snacks and beverages provided; there will also be a cash bar at the reception.

Travel

By Air: Waco is served by the Waco Regional Airport. Flights are offered by American Eagle (800-433-7300) and the Continental Connection (800-523-3273). Also, see <http://www.waco-texas.com/airport/airport.htm>. Airport car rentals should be reserved well in advance; the link to renting a car from the Waco airport is <http://www.waco-texas.com/airport/carrentals.htm>. Taxi service is available through Yellow Cab (254-756-1861).

Participants from outside Central Texas will likely first fly into Dallas or Houston before connecting to Waco. Instead of getting a connecting flight from these cities, you may want to rent a car in Dallas (100 mile drive to Waco) or Houston (about 180 miles to Waco). It is also possible to fly into Austin, rent a car there and drive 100 miles to Waco; however, at the present time, there are no connecting flights from Austin to Waco. Similarly, one can fly into Killeen (about 45 miles away), rent a car and drive to Waco; there are no connecting flights from Killeen to Waco.

Car Rental: Avis is the official car rental company for the sectional meeting in Waco. All rates include unlimited free mileage. Weekend daily rates are available from noon Thursday to Monday at 11:59 p.m. Rates do not include any state or local surcharges, tax, optional coverages, or gas refueling charges. Renters must meet Avis' age, driver, and credit requirements. For the best available rate and to make a reservation please call Avis at 800-331-1600 or go online at <http://www.avis.com>. Please use the AMS meeting **Avis Discount Number J098887**.

Driving: The Baylor campus is easily accessed from I-35. To get to the Baylor Science Building, exit I-35 North or South at Exit 335B onto University Parks Drive and go east (away from downtown and towards the Ferrell Center). Turn right on Bagby and right on Speight. Your first right turn will be into a parking lot for the BSB.

- From Dallas/Fort Worth: Take I-35 South to Exit 335B and turn left onto University Parks Drive.
- From Austin: Take I-35 North to Exit 335B and turn right onto University Parks Drive.
- From Houston: Take US-290 West and merge right onto TX-6 North; merge onto TX-434 SPUR North; merge left onto US-77 Business South ramp then turn right onto University Parks Drive.

Please visit <http://www.baylor.edu/map/index.php?id=10724> to view a map with driving directions.

Weather

The weather in Waco in October is usually warm-hot during the day and cool-warm in the evenings. The average low for October 16-18 is 56° while the average high is about 79°. Participants should consult weather information on the Web prior to the meeting at <http://www.weather.com/weather/Local/USTX1413?>

Information for International Participants

Information for International Participants Visa regulations are continually changing for travel to the United States. Visa applications may take from three to four months to process and require a personal interview, as well as specific personal information. International participants should view the important information about traveling to the U.S. found at http://www7.nationalacademies.org/visas/Traveling_to_US.html and <http://travel.state.gov/visa/index.html>. If you need a preliminary conference invitation in order to secure a visa, please send your request to wsd@ams.org.

If you discover you do need a visa, the National Academies website (see above) provides these tips for successful visa applications:

* Visa applicants are expected to provide evidence that they are intending to return to their country of residence. Therefore, applicants should provide proof of "binding" or sufficient ties to their home country or permanent residence abroad. This may include documentation of the following:

- * family ties in home country or country of legal permanent residence
- * property ownership
- * bank accounts
- * employment contract or statement from employer stating that the position will continue when the employee returns;
- * Visa applications are more likely to be successful if done in a visitor's home country than in a third country;
- * Applicants should present their entire trip itinerary, including travel to any countries other than the United States, at the time of their visa application;
- * Include a letter of invitation from the meeting organizer or the U.S. host, specifying the subject, location, and dates of the activity, and how travel and local expenses will be covered;
- * If travel plans will depend on early approval of the visa application, specify this at the time of the application;
- * Provide proof of professional scientific and/or educational status (students should provide a university transcript).

University Park, Pennsylvania

Pennsylvania State University

October 24–25, 2009

Saturday – Sunday

Meeting #1052

Eastern Section

Associate secretary: Steven H. Weintraub

Announcement issue of *Notices*: August 2009

Program first available on AMS website: September 10, 2009

Program issue of electronic *Notices*: October 2009

Issue of *Abstracts*: Volume 30, Issue 4

Deadlines

For organizers: Expired

For consideration of contributed papers in Special Sessions: Expired

For abstracts: September 1, 2009

The scientific information listed below may be dated. For the latest information, see www.ams.org/amsmtg/sectional.html.

Invited Addresses

Michael K. H. Kiessling, Rutgers University, *N-body problems in relativity*.

Kevin R. Payne, Università degli di Milano, *PDE of mixed type: The twin challenges of globalization and diversity*.

Laurent Saloff-Coste, Cornell University, *Subelliptic heat kernel measures and holomorphic functions on complex Lie groups*.

Robert C. Vaughan, Pennsylvania State University, *Title to be announced*.

Special Sessions

Algebraic Combinatorics (Code: SS 6A), **Peter McNamara**, Bucknell University, and **Mark Skandera**, Lehigh University.

Analytic Number Theory (Code: SS 16A), **Angel V. Kumchev**, Towson University, **Michael P. Knapp**, Loyola College, and **Robert C. Vaughan**, Pennsylvania State University.

Arithmetic and Profinite Groups (Code: SS 19A), **Ali-reza Salehi-Golsefidy**, Princeton University, **Martin D. Kassabov**, Cornell University, and **Mikhail V. Ershov**, University of Virginia.

Automorphisms of Riemann Surfaces and Related Topics (Code: SS 15A), **S. Allen Broughton**, Rose-Hulman Institute of Technology, **Anthony Weaver**, Bronx Community College, the City University of New York, and **Aaron D. Wootton**, University of Portland.

Combinatorial and Homological Aspects of Commutative Algebra (Code: SS 3A), **Amanda I. Beecher**, United States

Military Academy, and **Alexandre B. Tchernev**, University at Albany.

Commutative Algebra and Applications to Algebraic Geometry (Code: SS 11A), **Janet Striuli**, Fairfield University, and **Jooyoun Hong**, Southern Connecticut State University.

Difference Equations and Applications (Code: SS 2A), **Michael A. Radin**, Rochester Institute of Technology.

Function Fields and Their Applications (Code: SS 20A), **Mihran Papikian** and **Kirsten Eisentrager**, Pennsylvania State University.

Geometry of Integrable and Non-Integrable Dynamics (Code: SS 5A), **Boris Khesin**, University of Toronto, and **Mark Levi** and **Sergei Tabachnikov**, Pennsylvania State University.

Heat Kernel Analysis (Code: SS 8A), **Maria Gordina**, University of Connecticut, and **Laurent Saloff-Coste**, Cornell University.

Homotopy Theory (Code: SS 1A), **James Gillespie** and **Mark W. Johnson**, Pennsylvania State University, Altoona, **Simona Paoli**, University of Haifa, and **Donald Yau**, Ohio State University.

Integrable Systems and Related Areas (Code: SS 4A), **Sam Evans** and **Michael Gekhtman**, University of Notre Dame, and **Luen-Chau Li**, Pennsylvania State University.

Microlocal Analysis and Spectral Theory on Singular Spaces (Code: SS 14A), **Juan B. Gil** and **Thomas Krainer**, Pennsylvania State University, Altoona.

Accommodations

Participants should make their own arrangements directly with a hotel of their choice. Special rates have been negotiated at the hotels listed below but do not include the 8.5% occupancy tax. Participants should state that they will be attending the **PSU-AMS Meeting at Pennsylvania State University**. All rooms will be on a space available basis after the deadline given. The AMS is not responsible for rate changes or for the quality of the accommodations chosen. Because the Penn State area is a popular destination in the fall, participants should make reservations as early as possible. Be sure to check cancellation and checkout policies.

Days Inn, 240 South Pugh St., State College, PA 16801; Tel: 814-238-8454, Fax 814-237-1607; (http://www.daysinn.com/DaysInn/control/Booking/property_info?propertyId=...). The hotel is located approximately one block from the meeting site. Rates start at US\$87 per night (you must reference group code CGAMSS). Amenities include free wireless Internet, indoor heated pool, complimentary parking and airport shuttle service. There is a full-service restaurant at the hotel. **Deadline for reservations is September 23, 2009**. Be sure to check cancellation and checkout policies.

Quality Inn (formerly Motel 6 as of May '09), 1274 North Atherton St., State College, PA 16801; Tel: 814-234-1600, Fax 814-234-6665; http://www.motel6.com/reservations/motel_detail.aspx?num=4101. The hotel is located approximately five blocks from the meeting site. Rates start at US\$85 per night (you must reference group code #222819). Amenities include free 24-hour coffee, free high-speed wireless Internet access and parking.

Deadline for reservations is September 23, 2009. Be sure to check cancellation and checkout policies.

Ramada Inn, 1450 South Atherton St. (Business Route 322), State College, PA 16801; Tel: 814-238-3001, Fax: 814-237-1527; <http://www.ramadasc.com/>. The hotel is approximately two miles from the meeting site. Rates start at US\$85 per night. Amenities include complimentary high speed Internet access in all guest rooms, free newspaper, cable TV, free HBO, indoor pool, Jacuzzi, seasonal outdoor pool, and recreation facility. There is casual dining on-site serving breakfast, lunch, and dinner. Complimentary parking and transportation from University Park Airport is available. **Deadline for reservations is October 23, 2009.** Be sure to check cancellation and checkout policies.

Sleep Inn, 111 Village Drive, State College, PA 16803; Tel: 814-235-1020, Fax: 814-235-1388; http://www.sleepinn.com/hotel-state_college-pennsylvania-PA421. The hotel is approximately three blocks from the meeting site. Rates start at US\$65 per night (you must reference group code AMS "09"). Complimentary amenities include wireless high-speed Internet access, deluxe continental breakfast, newspaper, local calls, parking, and a fitness center. **Deadline for reservations is October 9, 2009.** Be sure to check cancellation and checkout policies.

Atherton Hotel, 125 South Atherton St. (Business Route 322), State College, PA 16801; Tel: 814-231-2100, Fax: 814-237-1130; <http://www.athertonhotel.net/>. The hotel is approximately a half mile from the meeting site. Rates start at US\$90 per night. Complimentary amenities include LodgeNet Internet access, newspaper, room, parking, and complimentary shuttle service to airport and local businesses. There is casual dining on-site serving breakfast and dinner. **Deadline for reservations is September 23, 2009.** Be sure to check cancellation and checkout policies.

Hampton Inn, 1101 East College Ave., State College, PA 16801; Tel: 814-231-1590, Fax: 814-238-7320; <http://www.hamptoninn.com/en/hp/hotels/index.jhtml?ctyhocn=SCECLHX>. The hotel is approximately a half mile from the meeting site. Rates start at US\$88 (you must reference group code AMS). Amenities include complimentary breakfast, airport shuttle, fitness center, pool, wireless high-speed Internet, and parking. **Deadline for reservations is September 25, 2009.** Be sure to check cancellation and checkout policies.

Food Service

There is no dining on the campus. The closest eatery is at the HUB-Robeson Center (<http://www.hfs.psu.edu/unionstreet/>), a food service facility located on the ground floor of the HUB-Robeson Center, Union Street Marketplace, which features a wide selection of foods at each of its eleven units. Within a short walking distance to College Street there are a variety of choices for dining; see <http://www.statecollege.com/dining/index.php>. Additional information and recommendations will be provided on-site.

Local Information

The Penn State visitors guide featuring a campus map and parking areas can be found at <http://www>.

campusmaps.psu.edu/print/. Additional information about the surrounding area can be found on the Downtown Map <http://www.statecollegecentral.com/comm/maps/downtown.htm>.

Other Activities

AMS Book Sale: Examine the newest titles from AMS. Most books will be available at a special 25% discount offered only at meetings. Complimentary coffee will be served courtesy of AMS Membership Services.

AMS Editorial Activity: An acquisitions editor from the AMS book program will be present to speak with prospective authors. If you have a book project that you would like to discuss with the AMS, please drop by the book exhibit.

Parking

There are multiple parking garages located on campus. Parking is free on campus on the weekends, except in posted "24-hour restricted lots". The closest parking area to the meeting site is the Eisenhower Parking Deck just outside the Thomas Building. For a map, see <http://www.campusmaps.psu.edu/print/pdf/main.pdf>.

Registration and Meeting Information

Invited Addresses, all sessions, Registration and Book Exhibit will be held in Thomas Building. Registration and the Book Exhibit will take place on the first floor in the lobby of Thomas Building on Saturday, October 24, from 7:30 a.m. to 4:00 p.m. and on Sunday, October 25, from 8:00 a.m. to noon. Fees are US\$40 for AMS or CMS members, US\$60 for nonmembers; and US\$5 for students, unemployed mathematicians, and emeritus members. Fees are payable on site by cash, check, or credit card.

Computer Labs

Computer labs are available in the McAllister building in rooms 103 and 105 to check email and access the Internet. The rooms are open from 8:00 a.m.–5:00 p.m. on Saturday and Sunday. More details will be provided at registration.

Banquet

There will be a banquet Saturday, October 24, 2009, at the Days Inn, 240 South Pugh St., State College, PA 16801, from 6:30 p.m.–9:00 p.m. The cost is US\$35 per person including tax and gratuity. **If you wish to attend the banquet please send an email to Hope Shaffer as soon as possible and send your check payable to Penn State University, c/o Hope Shaffer by October 15, 2009. Reservations will not be taken after this date and no money for the banquet will be accepted during the meeting.**

Hope Shaffer, Staff Assistant
The Pennsylvania State University
Department of Mathematics
107A McAllister Building
University Park, PA 16802
shaffer@math.psu.edu

The dinner buffet includes a create-your-own-salad station with mixed seasonal greens, assorted fresh garden vegetables, mixed olives, and assorted cheeses, with home style croutons and choice of dressings; grilled marinated

strip steak with sautéed wild mushrooms and natural reduction; oven baked chicken breast with parmesan cream; stuffed flounder with crab-laced white wine cream; freshly prepared seasonal vegetables and accompaniments; select artisan style rolls and breads; coffee (regular and decaf), tea, iced tea; chocolate cake and New York cheesecake.

Travel

Pennsylvania State University at University Park is located approximately in the geographic center of the state, in the town of State College. All modes of public transportation and several major highways service the university, making it easily accessible from metropolitan areas.

By Air: Airlines serve the State College area through the University Park Airport (SCE) located five miles from campus.

Limousine or taxi service is available from the airport to campus. The approximate cost from the airport to Penn State campus is about US\$20. For taxi service call 814-353-6001 or 814-238-4901; limousine service is available by calling 814-353-6000.

By Bus: Bus service on and around campus is provided by CATA. Maps and schedules are available at <http://www.catabus.com/>, at the information desks in the HUB-Robeson Center and Kern Graduate Building. For schedule information, call 814-238-CATA (814-238-2282).

Trailways, 814-238-7362, and Greyhound Lines, 814-237-5865, provide connections to and from State College. The bus station is about two blocks from the meeting rooms on Penn State campus.

Driving directions: University Park (State College) is readily accessible from both ends of the state via Interstate 80(I-80):

From New York City: Take the George Washington Bridge to I-80 West, which becomes the Keystone Shortway. Take Exit #161 (Bellefonte) and follow Route 220 South to State College exit #74.

From Philadelphia: Take the northeast extension of the Pennsylvania Turnpike to I-80. Take Exit #161 (Bellefonte) and follow Route 220 South to State College exit #74. Or, you may take Philadelphia Schuylkill Expressway to the Pennsylvania Turnpike, leave the Turnpike at Exit #247 (Harrisburg East), and follow I-283 to I-83 and proceed north on I-83 to the I-81 interchange. Then follow I-81 west to Route 322, 22 West exit. Proceed west on Route 322 through Lewistown to State College exit #74.

From Pittsburgh: Follow Route 22 East to Duncansville, I-99/Route 220 North to Route 322 East to Mt. Nittany Expressway/State College Exit #73. Or you may follow Route 22 East beyond Duncansville to Water Street, Route 45 East to Pine Grove Mills, and Route 26 North to State College.

From Washington D.C.: Take Route 270 to Frederick then Route 70 to the Breezewood, PA turnpike (Exit #161). Then go one exit west to Bedford (Exit #146); take I-99 North to Rt. 220 to Route 322 East to State College Exit #74. Or take I-95 or the Baltimore-Washington Parkway to Baltimore, West loop I-695 to I-83 North. Continue on I-83 North to the I-81 interchange. Then follow I-81 west to Route 322, 22 Exit. Proceed west on Route 322 to Lewistown and State College.

From the West: Take I-80 to Exit #123 (Woodland) just east of Clearfield, then Route 322 East to State College. Or, one may also Exit I-80 at Exit #161 (Bellefonte) and follow Route 220 South to State College Exit #74.

Car Rental: Avis is the official car rental company for the sectional meeting in State College. All rates include unlimited free mileage. Weekend daily rates are available from noon Thursday to Monday at 11:59 p.m. Rates do not include any state or local surcharges, tax, optional coverages, or gas refueling charges. Renters must meet Avis' age, driver, and credit requirements. For the best available rate and to make a reservation please call Avis at 800-331-1600 or go online at <http://www.avis.com>. Please use the AMS meeting Avis Discount Number J098887.

Weather

The weather at Penn State during the end of October is typically cool with possible rain showers and high temperatures around 60 degrees and lows about 40 degrees.

Information for International Participants

Visa regulations are continually changing for travel to the United States. Visa applications may take from three to four months to process and require a personal interview, as well as specific personal information. International participants should view the important information about traveling to the U.S. found at http://www7.nationalacademies.org/visas/Traveling_to_US.html and <http://travel.state.gov/visa/index.html>. If you need a preliminary conference invitation in order to secure a visa, please send your request to dls@ams.org.

If you discover you do need a visa, the National Academies website (see above) provides these tips for successful visa applications:

* Visa applicants are expected to provide evidence that they are intending to return to their country of residence. Therefore, applicants should provide proof of "binding" or sufficient ties to their home country or permanent residence abroad. This may include documentation of the following:

- family ties in home country or country of legal permanent residence
- property ownership
- bank accounts
- employment contract or statement from employer stating that the position will continue when the employee returns;

* Visa applications are more likely to be successful if done in a visitor's home country than in a third country;

* Applicants should present their entire trip itinerary, including travel to any countries other than the United States, at the time of their visa application;

* Include a letter of invitation from the meeting organizer or the U.S. host, specifying the subject, location and dates of the activity, and how travel and local expenses will be covered;

* If travel plans will depend on early approval of the visa application, specify this at the time of the application;

* Provide proof of professional scientific and/or educational status (students should provide a university

transcript). This list is not to be considered complete. Please visit the web sites above for the most up-to-date information.

Boca Raton, Florida

Florida Atlantic University

October 30 – November 1, 2009

Friday – Sunday

Meeting #1053

Southeastern Section

Associate secretary: Matthew Miller

Announcement issue of *Notices*: August 2009

Program first available on AMS website: September 17, 2009

Program issue of electronic *Notices*: October 2009

Issue of *Abstracts*: Volume 30, Issue 4

Deadlines

For organizers: Expired

For consideration of contributed papers in Special Sessions: Expired

For abstracts: September 8, 2009

The scientific information listed below may be dated. For the latest information, see www.ams.org/amsmtgs/sectional.html.

Invited Addresses

Spyridon Alexakis, Massachusetts Institute of Technology, *Global conformal invariants: A conjecture of Deser and Schwimmer*.

Kai-Uwe Bux, University of Virginia, *Arithmetic groups in positive characteristic*.

Dino J. Lorenzini, University of Georgia, *The index of an algebraic variety*.

Eduardo D. Sontag, Rutgers University, *Title to be announced*.

Special Sessions

Applied Partial Differential Equations (Code: SS 10A), **Shar Sajjadi** and **Timothy A. Smith**, Embry Riddle Aeronautical University.

Arithmetic Geometry (Code: SS 16A), **Pete L. Clark** and **Dino Lorenzini**, University of Georgia.

Commutative Ring Theory (Code: SS 3A), **Alan Loper**, Ohio State University, and **Lee C. Klingler**, Florida Atlantic University.

Concentration, Functional Inequalities, and Isoperimetry (Code: SS 2A), **Mario Milman**, Florida Atlantic University, **Christian Houdre**, Georgia Institute of Technology, and **Emanuel Milman**, Institute for Advanced Study.

Constructive Mathematics (Code: SS 1A), **Robert Lubar-sky**, **Fred Richman**, and **Martin Solomon**, Florida Atlantic University.

Dynamical Systems (Code: SS 6A), **William D. Kalies** and **Vincent Naudot**, Florida Atlantic University.

Enumerative Combinatorics (Code: SS 4A), **Christian Krattenthaler**, University of Vienna, and **Aaron D. Meyerowitz**, **Heinrich Niederhausen**, and **Wandi Wei**, Florida Atlantic University.

General Relativity and Related Partial Differential Equations (Code: SS 18A), **Spyridon Alexakis**, Massachusetts Institute of Technology, and **Gilbert Weinstein**, University of Alabama Birmingham.

Geometry and Topology (Code: SS 20A), **Alexander N. Dranishnikov** and **Yuli B. Rudyak**, University of Florida.

Graded Resolutions (Code: SS 13A), **Christopher Francisco**, Oklahoma State University, and **Irena Peeva**, Cornell University.

Graph Theory (Code: SS 11A), **Zixia Song** and **Yue Zhao**, University of Central Florida.

Harmonic Analysis (Code: SS 5A), **Galia D. Dafni**, Concordia University, and **J. Michael Wilson**, University of Vermont, Burlington.

Homological Aspects of Module Theory (Code: SS 7A), **Andrew R. Kustin**, University of South Carolina, **Sean M. Sather-Wagstaff**, North Dakota State University, and **Janet Vassilev**, University of New Mexico.

Hypercomplex Analysis (Code: SS 12A), **Craig A. Nolder**, Florida State University, and **John Ryan**, University of Arkansas at Fayetteville.

Invariants of Knots and Links (Code: SS 9A), **Heather A. Dye**, McKendree University, **Mohamed Elhamdadi**, University of South Florida, and **Louis H. Kauffman**, University of Illinois at Chicago.

Inverse Problems and Signal Processing (Code: SS 14A), **M. Zuhair Nashed** and **Qiyu Sun**, University of Central Florida.

Lattices, Coxeter Groups, and Buildings (Code: SS 19A), **Kai-Uwe Bux**, University of Virginia, **Jon McCammond**, University of California Santa Barbara, and **Kevin Wortman**, University of Utah.

Mathematical Models in Biology (Code: SS 17A), **Patrick de Leenheer**, University of Florida, and **Yuan Wang**, Florida Atlantic University.

Modular Forms and Automorphic Forms (Code: SS 21A), **Jonathan P. Hanke**, University of Georgia.

Partial Differential Equations from Fluid Mechanics (Code: SS 15A), **Chongsheng Cao**, Florida International University, **Jiahong Wu**, Oklahoma State University, and **Baoquan Yuan**, Henan Polytechnic University.

Recent Advances in Probability and Statistics (Code: SS 8A), **Lianfen Qian** and **Hongwei Long**, Florida Atlantic University.

Accommodations

Participants should make their own arrangements directly with a hotel of their choice as early as possible. Special rates have been negotiated with the hotels listed below. Rates quoted do not include sales tax of 11.5%. The AMS is not responsible for rate changes or for the quality of the accommodations. When making a reservation, participants should state that they are with the **American Mathematical Society (AMS) Meeting at FAU** group. Cancellation and early checkout policies vary; be sure to check when you make your reservation.

Hampton Inn Boca Raton, 1455 Yamato Rd., Boca Raton, FL 33431; 561-988-0200 (phone) or 561-988-0203 (fax); prices per room are US\$79/Deluxe King, US\$89/Double Bed, and US\$99/King Suite; includes coffeemaker, free Internet access, complimentary full-service exercise room, and outside pool. Complimentary hot breakfast served 7:00 a.m. to 10:00 a.m. on Saturday and Sunday (6:00 a.m. to 10:00 a.m. on Friday) or pick up a healthy “breakfast-in-a-bag” to go. Complimentary coffee, tea, and fruit are always available in the lobby. The hotel is located about 5.2 miles northeast of the meeting site, and is within walking distance of many restaurants and shops. **Deadline for reservations is October 15, 2009.** Be sure to check cancellation and early checkout policies.

Hilton Garden Inn Boca Raton, 8201 Congress Ave., Boca Raton, FL 33487; 561-988-6110 (phone), 561-988-9256 (fax); US\$99/single or double; includes refrigerator, microwave, coffeemaker, free wireless Internet, and complimentary full hot breakfast; complimentary 24-hour business center access; Great American Grill serving breakfast, lunch, and dinner; fitness center; and outdoor pool. Limited van service to/from campus and area restaurants (advance reservation requested); located about 6.25 miles from the meeting site. **Deadline for reservations is October 2, 2009.** Participants may book online through www.bocaraton.stayhgi.com using the group code “MATH”. Be sure to check cancellation and early checkout policies. N.B. Cancel a minimum of 72 hours prior to arrival to avoid paying a penalty of first-night room and tax.

Embassy Suites Hotel, Boca Raton, 661 NW 53rd St., Boca Raton, FL 33487; 561-994-8200 (phone), 561-994-9518 (fax); US\$89/single king bed or two double-bedded suite with mini-refrigerator, microwave, and coffee/coffee maker, and high-speed wireless (fee). Also includes complimentary cooked-to-order breakfast with hot items; free fitness center, outside heated pool/whirlpool, daily complimentary manager’s reception, and free access to business center. Limited van service to/from campus and area restaurants; located about 4.25 miles northeast of the meeting site. **Deadline for reservations is October 2, 2009.** Be sure to check cancellation and early checkout policies.

Guest Suites of Boca Raton, 701 NW 53rd St., Boca Raton, FL 33487; 561-997-9500 (phone), 561-994-3565 (fax); US\$69/single or double, US\$79/triple, or \$89/quad, includes complimentary hot breakfast (7:00 a.m. to 10:00 a.m.), wireless Internet (fee), free coffee in lobby, restaurant in hotel providing limited room service, and outside pool/spa. Limited van service to/from campus and area restaurants; located about 4.25 miles northeast of the meeting site. **Deadline for reservations is October 15, 2009.** Be sure to check cancellation and early checkout policies.

Marriott Courtyard Boca Raton, 2000 NW Executive Center Court, Boca Raton, FL 33431; 561-241-7070 (phone), 561-241-7080 (fax); US\$69/single or double, includes free wireless Internet, in-room coffeemaker, fitness center, outdoor pool, breakfast buffet (fee), convenience store on premises. Located about 1.75 miles west of the meeting site. **Deadline for reservations is October 5,**

2009. Be sure to check cancellation and early checkout policies.

Hilton Suites Boca Raton, 7920 Glades Rd., Boca Raton, FL 33434; 561-483-3600 (phone), 561-852-9976 (fax); US\$85/single or double suite (private bedroom with separate living area and pullout sofa bed), includes coffee-maker, microwave, mini-refrigerator, high-speed Internet (fee); also complimentary are a cooked-to-order breakfast as well as a two-hour evening cocktail reception (held daily), and limited van service to/from campus and area restaurants. Hotel has a heated pool, Jacuzzi, and fitness center, and is located about 4.3 miles west of the meeting site. **Deadline for reservations is October 8, 2009.** Be sure to check cancellation and early checkout policies.

Food Service

Information will be available at the meeting.

Local Information

The university’s website is www.fau.edu; the department of mathematics is at www.math.fau.edu.

Local attractions in Boca Raton:

The quietest and prettiest beach is South Beach, 400 N. Ocean Blvd., half a mile long, and backed by the scenic South Beach Park. South Beach Park features over 25 acres and 1,600 feet of beach. Lifeguards are on duty, and the park also offers picnic areas, showers, restrooms, and more.

Families enjoy the action on the Delray municipal beach which features restrooms and lifeguards, and is popular for surfing, windsurfing, volleyball, and boating. Several restaurants are adjacent.

The Boca Raton Museum of Art’s new 44,000 square-foot facility at 501 Plaza Real in Mizner Park features new exhibition, education, and collection galleries, and enhances fourfold the museum’s programming capabilities. The Museum was founded in 1950 as the Art Guild of Boca Raton.

Caldwell Theatre, 7873 N. Federal Hwy., offers a myriad of theatrical works throughout the course of their season. Off-Broadway plays, as well as well-known dramas, comedies, and classics are performed by this group.

Dagger Wing Nature Center, 11200 Park Access Rd., is a 39-acre park featuring a vast variety of birds. Woodpeckers, songbirds, egrets, herons, warblers, and more can be viewed here.

Gumbo Limbo Environmental Complex, 1801 N. Ocean Blvd., is a 20-acre complex that is home to one of the few surviving coastal hammocks, also known as a forest island. An elevated boardwalk takes visitors through the hammock. This site is also where sea turtles come to lay their eggs. Turtle walks are available May through July.

Other Activities

Book Sales: Stop by the on-site AMS Bookstore and review the newest titles from the AMS, enter the free book drawing, enjoy up to 25% off all AMS publications, or take home an AMS t-shirt! Complimentary coffee will be served courtesy of AMS Membership Services.

AMS Editorial Activity: An acquisitions editor from the AMS book program will be present to speak with prospective authors. If you have a book project that you would like to discuss with the AMS, please stop by the book exhibit.

Parking

Watch the AMS website at <http://www.ams.org/amsmtgs/sectional.html> for updated information.

Registration and Meeting Information

The meeting is on the campus of Florida Atlantic University, Boca Raton, Florida. The locations for the Invited Addresses, sessions, and registration are currently being determined. Watch the AMS website at <http://www.ams.org/amsmtgs/sectional.html> for updated information.

The registration desk will be open Friday, October 30, noon to 4:30 p.m., and Saturday, October 31, 7:30 a.m. to 4:00 p.m.; it will not be open on Sunday, November 1. Fees are US\$40 for AMS or CMS members, US\$60 for nonmembers; and US\$5 for students, unemployed mathematicians, and emeritus members. Fees are payable on site by cash, check, or credit card.

Satellite Workshops

Some participants may be interested in these additional activities scheduled just before the AMS Sectional Meeting; please note there will be Special Sessions on these same topics during the meeting:

International Workshop on Concentration, Functional Inequalities, and Isoperimetry, organized by Christian Houdré, Georgia Institute of Technology; Emanuel Milman, Institute for Advanced Study; and Mario Milman, Florida Atlantic University. Watch the website at <http://math.fau.edu/~internationalworkshop/index.html> for more details.

Constructive Mathematics, organized by Robert Lubar-sky, Fred Richman, and Martin Solomon, Florida Atlantic University. See the website at <http://math.fau.edu/Richman/Worshop/>.

Travel, Campus Map, and Directions

A campus map is found at <http://uavp.fau.edu/Flashmap/FAUMap.html>.

The Boca Raton area is served by three main airports located in Fort Lauderdale, West Palm Beach, and Miami. The first two are much closer to campus than Miami.

Fort Lauderdale/Hollywood International Airport (FLL), <http://www.broward.org/airport>, is about 27 miles south of campus. GO Airport Shuttle (800-244-8252 or 954-561-888) provides service to Boca Raton for US\$22 (shared ride, walk-up service) or US\$75 private car.

Palm Beach International Airport (PBI), <http://www.pbia.org/guide/ground.aspx>, is about 27 miles north of campus. Taxi fare to campus is approximately US\$82 plus gratuity; town car flat rate is US\$77 plus 20% gratuity. Call Palm Beach Transportation at 561-684-9900 for more information. SuperShuttle provides service to Boca Raton for US\$30 for the first passenger and US\$11 for each additional passenger; call 561-233-0600 for reservations.

Miami International Airport (MIA), http://www.miami-airport.com/html/ground_transportation.html, is about 48 miles south of campus. Taxi fare is about \$125 plus tax.

Driving directions to campus: Using your favorite Internet mapping service (e.g., <http://maps.yahoo.com>, <http://www.mapquest.com>), enter your starting location, then use 777 Glades Rd., Boca Raton, FL 33431 as your ending point for directions and mileage estimates.

Car Rental: Avis is the official car rental company for the sectional meeting in Boca Raton. All rates include unlimited free mileage. Weekend daily rates are available from noon Thursday to Monday at 11:59 p.m. Rates do not include any state or local surcharges, tax, optional coverages, or gas refueling charges. Renters must meet Avis' age, driver, and credit requirements. For the best available rate and to make a reservation please call Avis at 800-331-1600 or go online at <http://www.avis.com>. Please use the AMS meeting **Avis Discount Number J098887**.

Weather

Late October temperatures in Boca Raton range from the mid 60s F. to the mid 80s F. Showers are possible so bringing an umbrella is advisable.

Information for International Participants

Visa regulations are continually changing for travel to the United States. Visa applications may take from three to four months to process and require a personal interview, as well as specific personal information. International participants should view the important information about traveling to the U.S. found at http://www7.nationalacademies.org/visas/Traveling_to_US.html and <http://travel.state.gov/visa/index.html>. If you need a preliminary conference invitation in order to secure a visa, please send your request to dls@ams.org.

If you discover you do need a visa, the National Academies website (see above) provides these tips for successful visa applications:

- * Visa applicants are expected to provide evidence that they are intending to return to their country of residence. Therefore, applicants should provide proof of "binding" or sufficient ties to their home country or permanent residence abroad. This may include documentation of the following:

- family ties in home country or country of legal permanent residence
- property ownership
- bank accounts
- employment contract or statement from employer stating that the position will continue when the employee returns;

- * Visa applications are more likely to be successful if done in a visitor's home country than in a third country;

- * Applicants should present their entire trip itinerary, including travel to any countries other than the United States, at the time of their visa application;

- * Include a letter of invitation from the meeting organizer or the U.S. host, specifying the subject, location and

dates of the activity, and how travel and local expenses will be covered;

* If travel plans will depend on early approval of the visa application, specify this at the time of the application;

* Provide proof of professional scientific and/or educational status (students should provide a university transcript). This list is not to be considered complete. Please visit the web sites above for the most up-to-date information.

Riverside, California

University of California

November 7–8, 2009

Saturday – Sunday

Meeting #1054

Western Section

Associate secretary: Michel L. Lapidus

Announcement issue of *Notices*: September 2009

Program first available on AMS website: September 24, 2009

Program issue of electronic *Notices*: November 2009

Issue of *Abstracts*: Volume 30, Issue 4

Deadlines

For organizers: Expired

For consideration of contributed papers in Special Sessions: July 21, 2009

For abstracts: September 15, 2009

The scientific information listed below may be dated. For the latest information, see www.ams.org/amsmtgs/sectional.html.

Invited Addresses

Christopher Hacon, University of Utah, *Classification of algebraic varieties*.

Birge Huisgen-Zimmerman, University of California Santa Barbara, *Representations of quivers with relations. Geometric aspects*.

Jun Li, Stanford University, *Toward high genus GW-invariants of quintic Calabi-Yau threefolds*.

Joseph Teran, University of California Los Angeles, *Title to be announced*.

Special Sessions

Algebraic Geometry (Code: SS 1A), **Christopher Hacon**, University of Utah, and **Ziv Ran**, University of California Riverside.

Algebraic Structures in Knot Theory (Code: SS 17A), **Alissa S. Crans**, Loyola Marymount University, and **Sam Nelson**, Claremont McKenna College.

Arithmetic Combinatorics (Code: SS 16A), **Mei-Chu Chang**, University of California Riverside, and **Alex Gamburd**, University of California Santa Cruz and Northwestern University.

Calabi-Yau Manifolds (Code: SS 15A), **Owen Darricott**, University of California Riverside, **Jun Li**, Stanford University, and **Bun Wong** and **Yat-Sun Poon**, University of California Riverside.

Dynamical Systems (Code: SS 18A), **Nicolai Haydn**, University of Southern California, and **Huyi Hu**, Michigan State University.

Fluid Mechanics (Code: SS 5A), **James Kelliher** and **Qi Zhang**, University of California Riverside.

Fractal Geometry, Dynamical Systems, Number Theory and Analysis on Rough Spaces (Code: SS 6A), **Michel L. Lapidus**, University of California Riverside, **Hung Lu**, Hawaii Pacific University, and **Erin P. J. Pearse**, University of Iowa.

Global Riemannian Geometry (Code: SS 14A), **Fred Wilhelm**, University of California Riverside, and **Peter Petersen**, University of California Los Angeles.

History and Philosophy of Mathematics (Code: SS 4A), **Shawnee L. McMurrin**, California State University San Bernardino, and **James J. Tattersall**, Providence College.

Homotopy Theory and Higher Algebraic Structures (Code: SS 8A), **John Baez** and **Julie Bergner**, University of California Riverside.

Interactions Between Algebraic Geometry and Noncommutative Algebra (Code: SS 9A), **Kenneth R. Goodearl**, University of California Santa Barbara, **Daniel S. Rogalski**, University of California San Diego, and **James Zhang**, University of Washington.

Knotting Around Dimension Three: A Special Session in Memory of Xiao-Song Lin (Code: SS 11A), **Martin Scharlemann**, University of California Santa Barbara, and **Mohammed Ait Nouh**, University of California Riverside.

Noncommutative Geometry (Code: SS 2A), **Vasiliy Dolgushev** and **Wee Liang Gan**, University of California Riverside.

Operator Algebras (Code: SS 13A), **Marta Asaeda** and **Aviv Censor**, University of California Riverside, and **Adrian Ioana**, Clay Institute and Caltech.

Representation Theory (Code: SS 3A), **Vyjayanthi Chari**, **Wee Liang Gan**, and **Jacob Greenstein**, University of California Riverside.

Representations of Finite Dimensional Algebras (Code: SS 7A), **Frauke Bleher**, University of Iowa, **Birge Huisgen-Zimmermann**, University of California at Santa Barbara, and **Markus Schmidmeier**, Florida Atlantic University.

Research Conducted by Students (Code: SS 10A), **Robert G. Niemeyer** and **Jack R. Bennett**, University of California Riverside.

Stochastic Analysis and Applications (Code: SS 12A), **Michael L. Green**, **Alan C. Krinik**, and **Randall J. Swift**, California State Polytechnic University Pomona.

Seoul, South Korea

Ewha Womans University

December 16–20, 2009

Wednesday – Sunday

Meeting #1055

First Joint International Meeting of the AMS and the Korean Mathematical Society.

Associate secretary: Georgia Benkart

Announcement issue of *Notices*: August 2009

Program first available on AMS website: To be announced

Program issue of electronic *Notices*: To be announced

Issue of *Abstracts*: To be announced

Deadlines

For organizers: To be announced

For consideration of contributed papers in Special Sessions: To be announced

For abstracts: October 31, 2009

The scientific information listed below may be dated. For the latest information, see www.ams.org/amsmtg/internmtgs.html.

AMS Invited Addresses

Young Ju Choi, Pohang University of Science and Technology, *Title to be announced.*

Bumsig Kim, Korea Institute for Advanced Study, *Title to be announced.*

Minhyong Kim, University College London, *Title to be announced.*

Ki-ahm Lee, Seoul National University, *Title to be announced.*

James T. McKernan, Massachusetts Institute of Technology, *Title to be announced.*

Frank Morgan, Williams College, *Title to be announced.*

Hee Oh, Brown University, *Title to be announced.*

Terence Tao, University of California Los Angeles, *Title to be announced.*

Van Vu, Rutgers University, *Title to be announced.*

AMS Special Sessions

(Code: SS 3A), **Jaeyoung Byeon**, Pohang University of Science & Technology, and **Zhi-Qiang Wang**, Utah State University.

(Code: SS 4A), **Youn-Seo Choi**, Korea Institute for Advanced Study, **YoungJu Choie**, Pohang University of Science & Technology, and **Wen-ching Winnie Li**, Pennsylvania State University.

Algebraic Geometry (Code: SS 2A), **Yongnam Lee**, Sogang University, **Ian Morrison**, Fordham University, and **James McKernan**, Massachusetts Institute of Technology.

Arithmetic of Quadratic Forms (Code: SS 13A), **Myung-Hwan Kim**, Seoul National University, and **Wai Kiu Chan**, Wesleyan University.

Combinatorial Matrix Theory (Code: SS 8A), **Suk-Geun Hwang**, Kyungpook National University, and **Bryan Shader**, University of Wyoming.

Combinatorics (Code: SS 17A), **Dongsu Kim**, Korea Advanced Institute of Science & Technology, **Soojin Cho**, Ajou University, and **Bruce Sagan**, Michigan State University.

Computational Science and Engineering (Code: SS 25A), **Jeehyun Lee**, Yonsei University, and **Max Gunzburger**, Florida State University.

Creativity, Giftedness, and Talent Development in Mathematics (Code: SS 23A), **Kyeong-Hwa Lee**, Seoul National University, and **Bharath Sriraman**, University of Montana.

Cryptography (Code: SS 22A), **Hyang-Sook Lee**, Ewha Womans University, and **Alice Silverberg**, University of California Irvine.

Differential and Integral Geometry (Code: SS 28A), **Young Jin Suh**, Kyungpook National University, **Byung Hak Kim**, Yonsei University, **Yongdo Lim**, Kyungpook National University, **Gaoyong Zhang**, Polytechnic University of NYU, and **Jiazu Zhou**, Southwest University.

Ergodic Theory and Dynamical Systems (Code: SS 18A), **Keonhee Lee**, Chungnam National University, **Jeong-Yup Lee**, Korea Institute for Advanced Study, and **Jane Hawkins**, University of North Carolina.

Financial Mathematics (Code: SS 10A), **Hyejin Ku**, York University, **Hyungeon Koo**, Ajou University, and **Kiseop Lee**, University of Louisville.

Geometric Structures and Geometric Group Theory (Code: SS 1A), **In Kang Kim**, Korea Advanced Institute of Science & Technology, and **Seonhee Lim**, Cornell University.

Geometry of Syzygies and Computations (Code: SS 6A), **Sijong Kwak**, Korea Advanced Institute of Science & Technology, **Hyungju Park**, Korea Institute for Advanced Study, and **Jerzy Weyman**, Northeastern University.

Harmonic Analysis and Its Applications (Code: SS 12A), **Sunggeum Hong**, Chosun University, and **Andreas Seeger**, University of Wisconsin.

Inverse Problems and Imaging (Code: SS 19A), **Hyeonbae Kang**, Inha University, and **Gunther Uhlmann**, University of Washington.

Knot Theory and Related Topics (Code: SS 24A), **Jae Choon Cha**, Pohang University of Science and Technology, and **Kent Orr**, Indiana University.

Lie Symmetries and Solitons (Code: SS 11A), **Woo-Pyo Hong**, Catholic University of Daegu, **Anjan Biswas**, Delaware State University, and **Chaudry M. Khalique**, North-West University.

Mathematical Analysis in Fluid, Gas Dynamics, and Related Equations (Code: SS 21A), **Minkyu Kwak**, Chonnam National University, **Hyeong-Ohk Bae**, Ajou University, **Seung-Yeal Ha**, Seoul National University, and **Simon Seok Hwang**, LaGrange College.

Mathematical Biology (Code: SS 26A), **Eunok Jung**, Konkuk University, and **Jae-Hun Jung**, SUNY at Buffalo.

Mathematical Logic and Foundation (Code: SS 27A), **Byunghan Kim**, Yonsei University, and **Ivo Herzog**, Ohio State University.

Noncommutative Ring Theory (Code: SS 7A), **Yang Lee**, Pusan National University, and **Nam Kyun Kim**, Hanbat National University.

Nonlinear Partial Differential Equations and Viscosity (Code: SS 15A), **Ki-ahm Lee**, Seoul National University, and **Inwon Kim**, University of California Los Angeles.

Operator Theory and Operator Algebras (Code: SS 9A), **Il Bong Jung**, Kyungpook National University, **Ja A. Jeong**, Seoul National University, **George Exner**, Bucknell University, and **Ken Dykema**, Texas A&M University.

Operator Theory in Analytic Function Spaces (Code: SS 20A), **Hyung Woon Koo** and **Boo Rim Choe**, Korea University, and **Kehe Zhu**, SUNY at Albany.

Representation Theory (Code: SS 5A), **Jae-Hoon Kwan**, University of Seoul, and **Kyu-Hwan Lee**, University of Connecticut.

Spectral Geometry and Global Analysis (Code: SS 16A), **Jinsung Park**, Korea Institute for Advanced Study, and **Maxim Braverman**, Northeastern University.

Symplectic Geometry and Mirror Symmetry (Code: SS 14A), **Jae-Suk Park**, Yonsei University, **Cheol-Hyun Cho**, Seoul National University, and **Yong-Geun Oh**, University of Wisconsin.

This announcement was composed with information taken from the website maintained by the local organizers at <http://www.kms.or.kr/kmsams/>. Please watch this website for the most up-to-date information.

This is the first joint meeting of the Korean Mathematical Society (KMS) and the American Mathematical Society (AMS). All scientific sessions and events will take place at Ewha Womans University from December 16 to 20, 2009. The meeting is specifically organized to bring mathematicians from the United States and Korea together. The scientific objectives of this meeting are to disseminate recent research results to a wider audience. The meeting is open to all areas of the mathematical sciences.

Abstracts

The deadline for abstracts is October 15, 2009. Talks are invited in any area of the mathematical sciences, with acceptance at the discretion of the organizers. If your talk falls under the heading of one of the special sessions already listed, please contact one of the session organizers before submitting an abstract, as special sessions have limited time slots. An online system for abstract submission will be available on the KMS-AMS website at <http://www.kms.or.kr/kmsams/>.

Accommodations

Hotel reservation procedures are available on the official conference website at <http://www.kms.or.kr/KmsAms/contents/Accommodations.html>. Reservations can be made directly by email with the hotel of your choice. Please contact the hotel of your choice directly for current rates, methods of payment, and cancellation policies.

Somerset Palace Hotel, No. 85, Susong-Dong, Jongno-Gu, Seoul, 110-885, Korea. Contact: Sales Manager Jimmy Lee, 1+82-2-6730 8005, fax +82-2-6730 8001, email: jimmy.lee@the-ascott.com, <http://www.somersetpalace.co.kr/>,

reservation form: http://www.kms.or.kr/kmsams/reservation_form/somerset_palace_seoul.doc. (Please fill out this form and send it to Jimmy Lee via email). Somerset Palace is located in the downtown Seoul, Gangbuk district. It offers a tranquil environment with a beautiful garden and city views. Breakfast included with room rate.

Lotte City Hotel (MAPO), 423-3, Gongduk-Dong, Mapo-Ku, Seoul, 121-705, Korea. Contact: Sales Manager Lena Kim, 1+82-2-6009-1041, fax +82-2-6009-1004, email: lena.kim@lotte.net, <http://www.lottacityhotel.co.kr/>, reservation form: http://www.kms.or.kr/kmsams/reservation_form/lotte_city_hotel.doc. (Please fill out this form and send it to Lena Kim via email).

Koreana Hotel, 61-1, 1-Ga, Tae Pyung-Ro, Joong-Gu, Seoul, 100-101, Korea. Contact: Sales Manager Young Kim, 1+82-2-2171-7913, fax +82-2-730-9025, email: sunwoo@koreanahotel.com, <http://www.koreanahotel.co.kr/>. The Koreana Hotel is located at the Gwanghwamun Intersection in the heart of Seoul, surrounded by the best that the city has to offer, including the ancient Doksugung Palace which is within walking distance and scenic Mt. Namsan.

Casaville (Shinchon), 15F, 57-26 Nogosan-dong, Mapo-gu, Seoul, 121-807, Korea. Contact: Marketing Manager Jeong se jin, 1+82-2-6220-4100, fax +82-2-6352-1101, email: sjjeong@htc21.co.kr, <http://www.casaville.co.kr/>, reservation form: http://www.kms.or.kr/kmsams/reservation_form/casaville.xls. (Please fill out this form and send it to Jeong se jin via email). The Casaville is a 15-story building, and is located in the trendy area of Sinchon. Located in the heart of Gangbuk, the largest commercial area, and near all modes of transportation, the Casaville is just a few steps away from the Sinchon subway station line 2 and a 60-minute drive from the Incheon International Airport.

Conference Location and Preliminary Program

All scientific sessions will take place within the Ewha Campus Complex (ECC), Ewha Womans University, 11-1 Daehyun-Dong, Seodaemun-Gu, Seoul 120-750, Korea (Tel: +82-2-3277-2114, Fax: +82-2-393-5903), from Wednesday, December 16, to Sunday, December 20. A very preliminary program sketch may be found at <http://www.kms.or.kr/KmsAms/contents/Programs.html>.

The ECC is a high-tech underground campus. The six-story building dips deep into the earth and accommodates a large auditorium and some forty seminar rooms, and Cinecube, an independent movie theater chain. Other public facilities include a Kyobo Bookstore, convenience store, flower shop, Starbucks Coffee, gym and cafes/restaurants.

Local Information/Tourism

For further information visit <http://www.kms.or.kr/kmsams/contents/generalinformation.html>, or contact kms@kms.or.kr.

Other Events

A special public lecture will be given by Frank Morgan, Williams College, on Wednesday evening, December 18,

at 6:00 p.m. The title and location of the talk will be announced at a later date.

Restaurants/Food Service

Cafes and restaurants are conveniently located within the Ewha Campus Complex. Other restaurant information will be available at the registration desk.

Registration and Meeting Information

The meeting will take place on the campus of Ewha Womans University, 11-1 Daehyun-Dong, Seodaemun-Gu, Seoul 120-750, Korea. For more information about the campus see <http://www.ewha.ac.kr/english/>.

Registration: Type A Regular includes conference documents, banquet on Thursday evening, three lunches (December 16–18) and tea/coffee breaks. Type A Regular registration is US\$50/KRW60,000, and student registration is US\$25/KRW30,000. Type B registration does not include lunch and is US\$40/KRW50,000, and student registration is US\$20/KRW25,000. Additional information about registration procedures will be available soon at <http://www.kms.or.kr/KmsAms/contents/Registration.html>.

Social Events

Reception: Date, time and location to be announced.

Excursions: Additional information to be announced. Conference banquet: Thursday evening, December 17, 2010. Additional information to be announced.

Travel and Maps

Incheon International Airport serves the Seoul area and is located approximately one hour away by car or bus from Seoul. For detailed information on various forms of travel from the airport to Seoul visit <http://www.kms.or.kr/kmsams/contents/airporttoseoul.html>.

An excellent site for general information about traveling to Seoul and Korea can be found at http://english.visitkorea.or.kr/enu/1001_About%20Korea.jsp.

VISA Information: All visitors to the Republic of Korea must have a valid passport and visa. Visitors with roundtrip tickets from countries who have a special agreement with Korea may be exempt from the visa requirement, and can stay in Korea visa-free for periods up to 30 days, or 90 days, depending on the type of agreement between two countries. When uncertain as to the requirement for entry visa to Korea, please contact the Korean embassy or a consulate as early as possible. For more information, visit the website of the **Korean Ministry of Foreign Affairs and Trade**.

Weather

For up-to-date weather reports and local information visit <http://www.wunderground.com/global/stations/47112.html>.

San Francisco, California

Moscone Center West and the San Francisco Marriott

January 13–16, 2010

Wednesday – Saturday

Meeting #1056

Joint Mathematics Meetings, including the 116th Annual Meeting of the AMS, 93rd Annual Meeting of the Mathematical Association of America (MAA), annual meetings of the Association for Women in Mathematics (AWM) and the National Association of Mathematicians (NAM), and the winter meeting of the Association for Symbolic Logic (ASL), with sessions contributed by the Society of Industrial and Applied Mathematics (SIAM).

Associate secretary: Matthew Miller

Announcement issue of *Notices*: October 2009

Program first available on AMS website: November 1, 2009

Program issue of electronic *Notices*: January 2010

Issue of *Abstracts*: Volume 31, Issue 1

Deadlines

For organizers: Expired

For consideration of contributed papers in Special Sessions: July 28, 2009

For abstracts: September 22, 2009

The scientific information listed below may be dated. For the latest information, see www.ams.org/amsmtg/national.html.

AMS Invited Addresses

James G. Glimm, Stony Brook University, *Title to be announced* (AMS Retiring Presidential Address).

Olga Holtz, University of California Berkeley, *Title to be announced*.

Richard W. Kenyon, Brown University, *Title to be announced*.

Igor Y. Rodnianski, Princeton University, *Title to be announced*.

Peter W. Shor, Massachusetts Institute of Technology, *Title to be announced* (AMS Josiah Willard Gibbs Lecture).

Richard P. Stanley, MIT, *Title to be announced* (AMS Colloquium Lectures).

Amie Wilkinson, Northwestern University, *Title to be announced*.

AMS Special Sessions

Some sessions are cosponsored with other organizations. These are noted within the parenthesis at the end of each listing, where applicable.

Algebraic Aspects of Cryptology (Code: SS 2A), **Jintai Ding**, University of Cincinnati, and **Chris Christensen**, Northern Kentucky.

Algebraic Methods in Signal Processing (Code: SS 3A), **Shamgar Gurevich**, University of California Berkeley, **Ronny Hadani**, University of Chicago, **Olga Holtz**, University of California Berkeley and Technical University Berlin, **Oded Schwartz**, Technical University Berlin, and **Nir Sochen**, Tel Aviv University.

Analysis and Control Under Uncertainty (Code: SS 4A), **Xioaming Wang**, Florida State University, **Yanzhao Cao**, Auburn University, and **Catalin Trenchea**, University of Pittsburgh.

Applications of Algebraic Geometry (Code: SS 5A), **Frank Sottile**, Texas A&M University, and **Luis Garcia-Puente**, Sam Houston State University.

Applications of Graph Theory (Code: SS 6A), **Richard Low**, San Jose State University, and **Ralucca M. Gera**, Naval Postgraduate School.

Applications of Time Scales to Biology, Economics, and Engineering (Code: SS 7A), **Martin Bohner**, Missouri University of Science and Technology, **Billur Kaymakçalan**, Southern University-Statesboro, and **Allan Peterson**, University of Nebraska-Lincoln.

Arithmetic Geometry (Code: SS 9A), **Bo-Hae Im**, Chung-Ang University, **Jennifer Johnson-Leung**, University of Idaho, and **Jennifer Paulhus**, Kansas State University.

Arithmetic and Nonarchimedean Dynamics (Code: SS 8A), **Joseph Silverman**, Brown University, **Michelle Manes**, University of Hawaii, and **Raphael Jones**, College of the Holy Cross.

Arithmetic of Function Fields (Code: SS 10A), **Allison Pacelli**, Williams College, and **Michael Rosen**, Brown University.

Biomathematics: Modeling in Biology, Ecology, and Epidemiology (Code: SS 12A), **Lih-Ing Roeger**, **Linda Allen**, and **Sophia Jang**, Texas Tech University, and **Olcay Akman**, Illinois State University.

Categorical and Algebraic Methods in Representation Theory (Code: SS 13A), **Jon Brundan**, University of Oregon, **Julia Pevtsova**, University of Washington, and **Eric Friedlander**, University of Southern California.

Commutative Algebra (Code: SS 15A), **Susan Cooper**, University of Nebraska-Lincoln, and **Graham Leuschke**, Syracuse University.

Degenerate and Singular Elliptic Partial Differential Equations (Code: SS 16A), **Marian Bocea** and **Cristina Popovici**, North Dakota State University.

Difference Equations and Applications (Code: SS 17A), **Michael Radin**, Rochester Institute of Technology.

Differential Galois Theory and Group Representations: A Tribute to Andy Magid (Code: SS 19A), **James Carrell**, University of British Columbia, **Lourdes Juan**, Texas Tech University, **Alex Lubotzky**, Hebrew University, **Brian Parshall**, University of Virginia, and **Marius van der Put**, University of Groningen.

Enumerative Combinatorics (Code: SS 18A), **Brian Miceli**, Trinity University, and **Jeff Remmel**, University of California San Diego.

Geometric Aspects of Lnk and 3-manifold Invariants (Code: SS 20A), **Oliver Dasbach**, Louisiana State University, and **Effie Kalfagianni**, Michigan State University.

Graph Algebras in Analysis and Algebra (Code: SS 21A), **Gene Abrams**, University of Colorado at Colorado Springs, and **Mark Tomforde**, University of Houston.

Harmonic Analysis and Representations of Reductive p -adic Groups (Code: SS 23A), **Robert Doran**, Texas Christian University, **Paul Sally**, University of Chicago, and **Loren Spice**, Texas Christian University.

History of Mathematics (Code: SS 24A), **Craig Fraser**, University of Toronto, **Deborah Kent**, Hillsdale College, and **Sloan Despeaux**, Western Carolina University (AMS-MAA).

Integrability of Dynamical Systems and Solitons Equations (Code: SS 25A), **Zhijun Qiao**, University of Texas-Pan American, **Taixi Xu**, Southern Polytechnic State University, and **Wenxiu Ma**, University of South Florida.

Interactions of Inverse Problems, Signal Processing and Imaging (Code: SS 26A), **M. Zuhair Nashed**, University of Central Florida.

L-Functions and Analytic Number Theory (Code: SS 28A), **Alina Bucur**, Massachusetts Institute of Technology, **Chantal David**, Concordia University, and **Matilde Lalin**, University of Alberta.

Mathematics and Physical Experiment (Code: SS 30A), **Roger Thelwell**, **Anthony Tongen**, and **Paul Warne**, James Madison University.

Mathematics of Computation (Code: SS 31A), **Susanne Brenner**, Louisiana State University, and **Chi-Wang Shu**, Brown University (AMS-SIAM).

Nonlinear Hyperbolic Equations and Control Systems in Physics and Engineering (Code: SS 11A), **Petronela Radu** and **Daniel Toundykov**, University of Nebraska-Lincoln.

Optimal Frames and Operator Algebras (Code: SS 35A), **David Larson**, Texas A&M University, **Deguang Han**, University of Central Florida, and **Shidong Li**, San Francisco State University.

Parabolic Geometries, Integrable Systems, and Twistor Theory (Code: SS 36A), **Dana Mihai**, Carnegie Mellon University, and **Jonathan Holland** and **George Sparling**, University of Pittsburgh.

Recent Advances in Evolution Equations and Applications (Code: SS 38A), **Guoping Zhang** and **Gaston N'Guerekata**, Morgan State University, **Yi Li**, University of Iowa, **Wen-Xiu Ma**, University of South Florida, and **Michael Goldberg**, Johns Hopkins University.

Representation Theory and Nonassociative Algebras (Code: SS 40A), **Andrew Douglas**, City University of New York.

Research in Mathematics by Undergraduates (Code: SS 41A), **Darren Narayan**, Rochester Institute of Technology (AMS-MAA-SIAM).

Spectral Problems on Compact Riemannian Manifolds (Code: SS 43A), **Carolyn Gordon**, Dartmouth College, **Ruth Gornet**, University of Texas at Arlington, and **Craig Sutton**, Dartmouth College (AMS-AWM).

Surreal Numbers (Code: SS 45A), **Lou van den Dries**, University of Illinois, and **Philip Ehrlich**, Ohio University (AMS-ASL).

The Mathematics of Information and Knowledge (Code: SS 46A), **Naoki Saito**, University of California Davis, **Ronald R. Coifman**, Yale University, **James G. Glimm**, SUNY

at Stony Brook, **Peter W. Jones**, Yale University, **Mauro Maggioni**, Duke University, and **Jared Tanner**, University of Edinburgh.

Use of Technology in Modern Complex Analysis Research (Code: SS 47A), **Beth Schaubroeck**, U.S. Air Force Academy, **Michael Dorff**, Brigham Young University, and **James Rolf**, U.S. Air Force Academy.

Voting Theory (Code: SS 48A), **Michael Jones**, Mathematical Reviews, **Brian Hopkins**, Saint Peter's College, and **Tommy Ratliff**, Wheaton College.

Zonotopal Algebra and Its Applications (Code: SS 49A), **Olga Holtz**, University of California Berkeley and Technical University Berlin, and **Amos Ron**, University of Wisconsin.

Call for MAA Contributed Papers

The MAA Committee on Contributed Paper Sessions solicits contributed papers pertinent to the sessions listed below. Contributed Paper Session organizers generally limit presentations to fifteen minutes. Each session room is equipped with a computer projector, an overhead projector, and a screen. Please note that the dates and times scheduled for these sessions remain tentative.

The Arts and Mathematics, Saturday afternoon, **Douglas E. Norton**, Villanova University. The Special Interest Group of the MAA on Math and the Arts continues its successful series on connections between things artistic and things mathematical, with all three terms broadly defined: Arts, mathematics, and connections! Dance and drama and design, music and mathematical metaphor, fabrics and fractals and functions and formulas, OULIPO and do-si-do, calculated and woven and ricocheted with splines or in hyperbolic space or on tori. Whether research, classroom, or hobby; whether from one side or another or from no side at all, bring your interest, knowledge, experience, and/or aesthetic sense, to learn, share, and enjoy.

Developmental Mathematics Education: Helping Under-Prepared Students Transition to College-Level Mathematics, Thursday afternoon, **Kimberly J. Presser** and **J. Winston Crawley**, Shippensburg University. The number of students arriving at college today under-prepared for college-level mathematics courses is on the rise. Many colleges and universities are developing new curriculum and programs to help ease the transition for these students into higher level mathematics courses. In order to help these students to be successful there are a number of issues to be considered, such as new strategies for support services, what remedial courses are being offered, and perhaps even the developmental education program university-wide. This session invites papers on all aspects of developmental mathematics education. In particular, what classroom practices are effective with such students and how does research in student learning inform these practices? For students interested in math-intensive majors such as the sciences, how can we best prepare these students for several subsequent mathematics courses? How can we best coordinate support services with the courses offered in our mathematics departments?

Engaging Students with Classroom Voting, Thursday morning, **Derek Bruff**, Vanderbilt University, **Kien Lim**, University of Texas at El Paso, and **Kelly Cline**, Carroll

College. Classroom voting is a teaching method in which students are asked to respond to multiple-choice or numeric-result questions posed by their instructors during class, often using handheld transmitters ("clickers") that allow for the instant display of distributions of responses. Classroom voting can be used to make on-the-fly teaching choices that are responsive to student learning needs, to generate small-group and whole-class discussion, and to create "times for telling" in which student misconceptions are uncovered and addressed. Clickers allow students to respond to questions independently and without their peers knowing how they have responded while allowing instructors to track student responses and thus expect full participation.

We seek papers on classroom voting that focus on at least one of these areas: teaching objectives (e.g., writing effective questions, engendering cognitive conflicts, addressing misconceptions), instructional strategies (e.g., peer instruction, team-based learning, methods of guiding class discussions), new technologies (e.g., using cell phones as clickers, integration with online resources), impact on students (e.g., enhanced student learning, increased student engagement, improved retention), overcoming constraints (e.g., limited class time for active learning), development of new materials (e.g., new sets of classroom voting questions), and strategies for getting started at the course and department level.

Experiences that Enrich the Education of Mathematics Majors, Wednesday afternoon, **Suzanne M. Lenhart**, University of Tennessee, **Steven J. Schlicker**, Grand Valley State University, **J. Douglas Faires**, Youngstown State University, and **Michael J. Dorff**, Brigham Young University. This session will feature models of programs that have been successful in enriching the education of mathematics majors beyond the standard curriculum. We are interested in talks that describe such experiences as internship programs, career seminars, research experiences, and similar programs for students that help inform them about the whole spectrum of opportunities within the mathematical sciences community. The session is sponsored by the MAA CUPM Subcommittee on Research by Undergraduates.

How Assessment Results Changed Our Program, Thursday afternoon, **Dick Jardine**, Keene State College, and **Barbara Edwards**, Oregon State University. The purpose of assessment in higher education is to improve student learning and to improve our programs. Is there evidence that program assessment has made a positive difference in student learning mathematics? This session will provide faculty teaching mathematics or quantitative literacy/reasoning courses the opportunity to disseminate how they have "closed the loop" in program assessment, making changes that have resulted in improvements in their programs, in their teaching, and ultimately in student learning.

Improving a Second Course in Statistics, Wednesday morning, **Nancy J. Boynton**, SUNY Fredonia, **Patricia B. Humphrey**, Georgia Southern University, and **Michael A. Posner**, Villanova University. This session seeks to provide a forum in which to discuss approaches to a second statistics course. Most colleges have a first course in statistics

that introduces many topics including the normal distribution, the t-distribution, hypothesis testing, confidence intervals and regression. The growth in enrollment in AP Statistics means that many college students may never take another course unless we have a good offering. In addition many “quantitatively challenged” students may shy away from majors that require the second course. Second courses may be pure “follow-ons” to the first (introductory) course (like Calculus II is to Calculus I) or something completely different. Of interest in this session are presentations related to the following: How to convince students to take a second course, innovative ideas for curriculum (what makes your course different), as well as successfully implemented activities, projects, and assessment practices particularly aimed at this course.

The session is sponsored by the SIGMAA on Statistics Education. In order to be considered for this session, applicants should submit a one-page summary of the presentation to Nancy Boynton at nancy.boynton@fredonia.edu along with the abstract to JMM website. Presenters in the session will be considered for the SIGMAA on Statistics Education’s Best Contributed Presentation Award.

Innovative and Effective Ways to Teach Linear Algebra, Saturday morning, **David M. Strong**, Pepperdine University, **Gilbert Strang**, Massachusetts Institute of Technology, and **David C. Lay**, University of Maryland. Linear algebra is one of the most interesting and useful areas of mathematics, because of its beautiful and multifaceted theory, as well as the enormous importance it plays in understanding and solving many real world problems. Consequently, many valuable and creative ways to teach its rich theory and its many applications are continually being developed and refined. This session will serve as a forum in which to share and discuss new or improved teaching ideas and approaches.

These innovative and effective ways to teach linear algebra include, but are not necessarily limited to: (1) hands-on, in-class demos; (2) effective use of technology, such as Matlab, Maple, Mathematica, Java Applets or Flash; (3) interesting and enlightening connections between ideas that arise in linear algebra and ideas in other mathematical branches; (4) interesting and compelling examples and problems involving particular ideas being taught; (5) comparing and contrasting visual (geometric) and more abstract (algebraic) explanations of specific ideas; and (6) other novel and useful approaches or pedagogical tools.

The MAA SUMMA Program Turns 20—A Retrospective, Wednesday morning, **William A. Hawkins Jr.**, MAA and the University of the District of Columbia, **Efraim Armendariz**, University of Texas at Austin, **Camille A. McKayle**, University of the Virgin Islands, and **Robert E. Megginson**, University of Michigan, Ann Arbor. The late Marcia P. Sward created the Strengthening Underrepresented Minority Mathematics Achievement (SUMMA) Program in 1990 a year after she became MAA Executive Director. The goals of SUMMA are to increase minority participation in mathematics, science, and engineering and to improve the mathematics education of minorities. In the 20 years of SUMMA’s existence the nation has seen many initiatives and some successes toward achieving these goals.

Speakers will be invited and papers solicited to discuss progress and setbacks. Talks will be grouped into areas such as successful initiatives with pre-college students, undergraduate programs successful in developing and enhancing minority participation, successful REUs, graduate programs, and professional development/mentoring. There will be an invited lead presenter in each category together with shorter contributed papers. This session is co-sponsored by SUMMA and the Committee on Minority Participation in Mathematics.

Mathematical Texts: Famous, Infamous, and Influential, Saturday morning, **Fernando Q. Gouvêa**, Colby College, and **Amy Shell-Gellasch**, Pacific Lutheran University. Texts—books, articles, even letters—play a central role in the life of the mathematics community. This session will consist of historical papers discussing such texts, focusing on those that have had significant impact, for good or ill, on mathematics. This session is an extension of the MAA Short Course to be offered at the Joint Meetings.

Mathematics and Sports, Saturday morning, **Howard L. Penn**, U.S. Naval Academy. Sports provide a host of applications of mathematics. Examples exist that use concepts taught in calculus, differential equations, probability, statistics, and combinatorics. In this contributed paper session, we will showcase interesting applications of mathematics in various sports. The application should be suitable for use in the classroom. The mathematics may be at any level from freshman to senior. Talks may be expository or may highlight research, including undergraduate research.

Mathematics Courses for the Liberal Arts Student, Friday morning, **Reva Kasman**, Salem State College. Many mathematics departments now offer survey courses specifically designed to introduce the nonmajor to a vast array of mathematical topics and ideas, sometimes called Mathematics for Liberal Arts. These terminal courses frequently satisfy a general education core requirement in mathematics or quantitative reasoning. Textbook topics range from the extremely practical to the highly esoteric, including such subjects as voting theory, cryptography, symmetry, fractals, mathematical modeling, probability, number systems, and infinity. Assessment methods may incorporate creative projects and writing assignments, or encourage the students to connect mathematical topics to their own life experience or major field. This session seeks the presentation of innovative assignments and classroom activities, novel approaches to particular topics, and interdisciplinary projects that have been used successfully in such courses.

Mathematics, Equity, Diversity, and Social Justice, Friday morning, **Patricia Hale**, California State Polytechnic University Pomona, **Shandy Hauk**, University of Northern Colorado, and **Dave Kung**, St. Mary’s College, Maryland. Papers presented at this session address topics at the intersection of mathematics teaching and learning and the myriad issues of equity, diversity, and social justice. Papers are sought that address one or more of the following: developing college mathematics curricula that focus on social justice issues, preparing K-20 teachers to teach mathematics equitably to diverse populations, bringing

issues of social justice into the mathematics classroom, designing or implementing programs that address issues of equity in mathematics, reviewing policies in various mathematical communities (e.g., school, undergraduate, or research mathematics) that interact with issues of social justice and equity. Potential topics for a paper submitted to this session include: lessons learned about implementing and maintaining an Emerging Scholars Program, defining social justice and mathematics—what it looks like and what the goals are, culturally responsive college mathematics curriculum and instruction, equity in the design of mathematics assessments. Proposals are sought from mathematicians; mathematics education researchers; and mathematics educators, including those involved with K–20 instructional professional development and those who can inform a national audience about current endeavors (e.g., The Algebra Project, the Math for Social Justice Group).

Mathematics Experiences in Business, Industry and Government, Thursday morning, **Philip Gustafson**, Mesa State College, and **Michael Monticino**, University of North Texas. This contributed paper session will provide a forum for mathematicians with experience in Business, Industry and Government (BIG) to present papers or discuss projects involving the application of mathematics to BIG problems. BIG mathematicians as well as faculty and students in academia, who are interested in learning more about BIG practitioners, projects, and issues, will find this session of interest. This session is sponsored by the MAA Business, Industry and Government Special Interest Group (BIG SIGMAA).

Mathlets for Teaching and Learning Mathematics, Saturday afternoon, **Joe Yanik**, Emporia State University, **Thomas E. Leathrum**, Jacksonville State University, and **David M. Strong**, Pepperdine University. This session seeks to provide a forum in which presenters may demonstrate and discuss the effectiveness of mathlets and related materials that they have created or further developed. Mathlets are small computer-based (but ideally platform-independent) interactive tools for teaching math, frequently developed as World Wide Web materials such as scripts or Java applets, but there may be many other innovative variations. Mathlets allow students to experiment with and visualize a variety of mathematical concepts, and they can be easily shared by mathematics instructors around the world. The Mathlets introduced in this session will be available at <http://cs.jsu.edu/~leathrum/JMMsession2010.html>. This session is sponsored by the MAA Committee on Technology in Mathematics Education (CTIME).

My Most Successful Math Club Activity, Wednesday morning, **Jacqueline A. Jensen**, Sam Houston State University, **Deanna B. Haunsperger**, Carlton College, and **Robert W. Vallin**, Slippery Rock University and the MAA. Math clubs enhance the culture of a mathematics department. How does one develop a new group? How about refreshing an existing one? What sets apart effective, active, and engaging mathematics clubs? This session will answer those questions by featuring papers from math club advisors and others who will share their favorite non-standard activity for math clubs.

Our goal is to provide ideas and support for mentors of math clubs, especially those trying to begin or reactivate a group. Speakers should focus on a single activity that motivates and engages students, and, when applicable, suggestions for acquiring funding for such activities. It is our hope that these talks will spur immediate discussion between speakers and audience members, and possibly lead to a document to help math club advisors or possibly the development of an electronic forum. This session is sponsored by the MAA Committee on Undergraduate Student Activities and Chapters.

Online Homework—Innovation and Assessment, Thursday afternoon, **Michael E. Gage**, **Arnold K. Pizer**, and **Vicki Roth**, University of Rochester. The use of online homework systems such as the open source system WeBWork, commercial systems WebAssign, MapleTA and others has increased in recent years. This session gives instructors who are using these systems in an innovative manner and/or studying their educational effectiveness an opportunity to report on their findings. The first theme is innovative uses of online homework systems. Many instructors use these systems simply as a replacement for standard homework, but some employ them, for example, to promote a more interactive classroom. Others use them in conjunction with a workshop or to encourage students to review material before class. In this session, instructors will have an opportunity to share these and other innovative uses of these systems and to report on how successful these new approaches have been.

The second theme is assessment and evaluation of the impact of online homework systems on student learning, both when used simply as a replacement for standard homework and when used in innovative approaches. Topics may include, but are not limited to, changes in student behavior and persistence when using online homework systems, effects on student retention in courses, and the overall impact on student learning and success in courses.

Philosophy of Mathematics for Working Mathematicians, Friday afternoon, **Bonnie Gold**, Monmouth University, and **Carl Behrens**, Alexandria, Virginia. Philosophers have a wide range of views on the nature and existence of mathematical objects. How is it that mathematics continues to flourish, year after year, when philosophical questions about the fundamental nature of mathematical objects remain controversial and unsettled? This session invites papers that address, and clarify the relevance of, this issue, and propose views of mathematical objects that are consistent with mathematical practice. Papers on other topics in the philosophy of mathematics will be considered within time constraints. This session is sponsored by POM-SIGMAA, the SIGMAA for the Philosophy of Mathematics.

Preparing K–12 Teachers to Teach Algebra, Wednesday afternoon, **Elizabeth Burroughs**, Montana State University, **Angela M. Hodge**, North Dakota State University, and **William G. McCallum**, University of Arizona. Several recent reports (e.g., from The National Mathematics Advisory Panel, Achieve Inc., and The National Council on Teacher Quality) have emphasized that the teaching and learning of algebra plays a central role in the K–12 mathematics curriculum. In recognition of these reports, the MAA's

Committee on the Mathematical Education of Teachers (COMET) is sponsoring this session.

COMET promotes “timely renewal efforts of mathematics courses designed for prospective K–12 teachers” and “thoughtful participation of MAA members in schools and professional development programs that enhance the mathematical understanding of in-service K–12 teachers.” Presentations are invited that support COMET’s mission by reporting on work with prospective or practicing teachers that has a particular focus on curriculum, learning standards, or teacher preparation in support of the teaching and learning of algebra.

Publishing Mathematics on the Web, Friday afternoon, **Thomas E. Leathrum**, Jacksonville State University, **William F. Hammond**, The University at Albany, and **Kyle T. Siegrist**, University of Alabama in Huntsville. Emerging technologies, such as browser support for MathML, are changing the ways authors will be expected to present mathematical material in online documents. As academic journals move toward online formats, online presentation will become essential to the profession. Many useful tools have become available recently, including visual editors and simplified embedded mark-up. This session seeks to provide a venue for developers of new technologies and tools, and authors familiar with them, to demonstrate their work and share their experiences. This session is sponsored by the MAA Committee on Technology in Mathematics Education (CTIME).

Quantitative Reasoning and the Environment, Friday morning, **Maura B. Mast**, University of Massachusetts Boston, **Karen D. Bolinger**, Clarion University, and **Cinnamon Hillyard**, University of Washington Bothell. The combination of teaching quantitative literacy and environmental issues in the classroom can be a powerful one. Both fields naturally focus on mathematical topics such as understanding basic numeracy, constructing models, and generating and interpreting statistics. Furthermore, both fields emphasize concrete data, real-world applications, and mathematics in context. Courses that integrate quantitative literacy and the study of environmental issues are suitable for students at a range of levels, from those with a limited mathematics background, to calculus students, and beyond. This combination is also timely, given the active national conversation about implementing quantitative literacy requirements and the public’s increased awareness of environmental issues. There is a growing source of support material, from textbooks to workshops to web pages, providing further evidence of the interest in developing course materials that draw from both of these fields. We invite presentations addressing the teaching of quantitative literacy and environmental problems. This could include ideas and examples for how to bringing quantitative literacy and environmental mathematics together in the classroom, suggestions for how quantitative literacy can be used in the study of environmental problems, and resources available for this type of work. This session is jointly sponsored by SIGMAA-EM and SIGMAA-QL.

Research on the Teaching and Learning of Undergraduate Mathematics, Friday afternoon, **Keith Weber**, Rutgers

University, **Stacy Brown**, Pitzer College, **Natasha A. Speer**, University of Maine, and **Karen A. Marrongelle**, Portland State University. As part of its ongoing activities to foster research in undergraduate mathematics education and the dissemination of such research, the Special Interest Group of the Mathematical Association of America on Research in Undergraduate Mathematics Education (SIGMAA on RUME) solicits reports of research on the learning and teaching of undergraduate mathematics for its contributed paper session. We solicit proposals for research reports presenting results from completed research studies on undergraduate mathematics education that address one or more of the following themes: (1) results of current research; (2) contemporary theoretical perspectives and research paradigms, and (3) innovative methodologies and analytical approaches as they pertain to the study of undergraduate mathematics education. We also welcome preliminary reports on research projects in early stages of development or execution.

The Scholarship of Teaching and Learning in Undergraduate Mathematics, Wednesday afternoon, **Edwin P. Herman**, and **Nathan M. Wodarz**, University of Wisconsin-Stevens Point. The Scholarship of Teaching and Learning is a growing field in which faculty bring disciplinary knowledge to bear on questions of teaching and learning and use student-based evidence to support their conclusions. Work in this area emphasizes pedagogical techniques and questions. The scope of the research can range from small, relatively informal investigations about teaching innovations in the classroom to larger or more formal investigations of student learning.

Reports that address issues concerning the teaching and learning of undergraduate mathematics are invited. Appropriate for this session are reports of classroom-based investigations of teaching methods, student learning difficulties, or curricular assessment. Papers must discuss more than anecdotal evidence. For example, papers might reference the following types of evidence: student work, interviews, surveys, etc.

Goals of this session are to feature scholarly work focused on teaching of undergraduate mathematics; to provide a venue for mathematicians to make public their scholarly work on teaching; and to highlight evidence-based arguments for the value of teaching innovations.

Undergraduate Mathematical Biology, Friday morning, **Timothy D. Comar**, Benedictine University, and **Raina S. Robeva**, Sweet Briar College. “Future Research Biologists” (NRC, 2003) and “Math and BIO 2010: Linking Undergraduate Disciplines” (Steen, 2005) emphasize that aspects of biological research are becoming more quantitative and that life science students should be introduced to a greater array of mathematical and computational techniques and to the integration of mathematics and biological content at the undergraduate level. Since these reports, many successful programs and materials have been designed to address these issues.

This session will highlight successful implementations of biomathematics courses in undergraduate curriculum, new course materials for biomathematics courses, efforts to recruit students into biomathematics courses,

involvement of undergraduate students in biomathematics research, preparation for graduate work in biomathematics and computational biology, and assessment of how these courses and activities impact the students. Topics may include the issues related to the design of effective biomathematics courses, integration of biology into existing mathematics courses, collaborations between mathematicians and biologists that have led to new courses, course modules, or undergraduate research projects, effective use of appropriate technology in biomathematics courses, and assessment issues. Presenters are encouraged to provide handouts, electronic materials, or online references to their materials. This session is sponsored by the BIO SIGMAA.

Using Computer Algebra Systems in the Calculus Sequence, Thursday morning, **William Marion**, Valparaiso University. Since the calculus reform movement took hold in the late 1980s, mathematics faculty teaching calculus have used a number of tools to enhance student learning: Writing projects, oral presentations, portfolios, computer labs and computer demonstrations, to name a few. Many calculus courses now include a required laboratory experience. With the aid of mathematical software students solve a variety of well-designed problems in a “closed lab” environment.

This session solicits papers highlighting an innovative lab exercise in a Calculus I, II or III course that requires the use of a computer algebra system. The example to be presented should go beyond or expand upon ones usually found in standard calculus texts. It should have an “aha” quality to it. The paper should include a detailed description of the problem, rationale for why the exercise enhances student learning, the problem solution, a grading rubric, and any suggestions for adaptation by others.

Visualization in Mathematics, Saturday afternoon, **Sarah J. Greenwald**, Appalachian State University, and **Walter Whiteley**, York University. The ability to understand and create interesting visuals is essential in mathematics and in interdisciplinary research. Recent research on visualization highlights the extent to which significant portions of the student body bring a visual approach to their mathematics but some studies suggest that teachers may find it difficult to recognize visual reasoning and support the development of visual abilities.

We invite papers related to the following aspects of visualization: What skills are needed for success? What are the visual practices of research mathematicians? What is considered visually pleasing in mathematics? When are visuals helpful or detrimental for student learning? How do teachers develop visualization skills and train students to use visual information? How should we assess visualization skills?

Wavelets in Undergraduate Education, Thursday afternoon, **Caroline Haddad**, SUNY Geneseo, **Catherine Bénéteau**, University of South Florida, **David Ruch**, Metropolitan State College of Denver, **Patrick Van Fleet**, University of St. Thomas. Wavelets are functions that satisfy certain mathematical properties and are used to represent data or other functions. They work extremely well in analyzing data with finite domains having different scales or

resolutions. Interesting applications include digital image processing, FBI fingerprint compression, signal processing of audio files, de-noising noisy data, earthquake prediction, and solving partial differential equations. Wavelets have typically been studied at the graduate level, but are making their way into the undergraduate curriculum. We are interested in presentations that effectively incorporate wavelets in an innovative way at the undergraduate level. This may include an undergraduate course in wavelets; a topic on wavelets in some other course using, but not limited to, hands-on demonstrations, projects, labs that utilize technology such as Matlab, Mathematica, Maple, Java applets, etc.; or research opportunities for undergraduates.

General Contributed Paper Sessions, Wednesday, Thursday, Friday and Saturday morning and afternoons, **Eric S. Marland**, Appalachia State University, and **Daniel J. Curtin**, Northern Kentucky University. Papers may be presented on any mathematical topics. Papers that fit into one of the other sessions should be sent to that session, not to the general session.

Submission Procedures for MAA Contributed Paper Abstracts

Abstracts must be submitted electronically at <http://www.ams.org/cgi-bin/abstracts/abstract.pl>. Simply select the San Francisco meeting, fill in the number of authors, and then follow the step-by-step instructions. The deadline for abstracts is Tuesday, **September 22, 2009**.

Participants may submit at most two abstracts for MAA contributed paper sessions at any one meeting. If your paper cannot be accommodated in the session in which it is submitted, it will automatically be considered for the general session. Speakers in the general session are limited to one talk.

The organizer(s) of your session will automatically receive a copy of the abstract, so it is not necessary for you to send it directly to the organizer. However, some sessions require separate submissions directly to the organizer, so check for this detail. All accepted abstracts are published in a book that is available to registered participants at the meeting. Questions concerning the submission of abstracts should be addressed to abs-coord@ams.org.

Lexington, Kentucky

University of Kentucky

March 27–28, 2010

Saturday – Sunday

Meeting #1057

Southeastern Section

Associate secretary: Matthew Miller

Announcement issue of *Notices*: January 2010

Program first available on AMS website: February 11, 2010

Program issue of electronic *Notices*: March

Issue of *Abstracts*: Volume 31, Issue 2

Deadlines

For organizers: August 28, 2009

For consideration of contributed papers in Special Sessions: December 8, 2009

For abstracts: February 2, 2010

The scientific information listed below may be dated. For the latest information, see www.ams.org/amsmtgs/sectional.html.

Invited Addresses

Percy A. Deift, Courant Institute-New York University, *Title to be announced.*

Irina Mitrea, University of Virginia, *Title to be announced.*

Bruce Reznick, University of Illinois at Urbana-Champaign, *Title to be announced.*

Bernd Ulrich, Purdue University, *Title to be announced.*

Doron Zeilberger, Rutgers University, *Title to be announced* (Erdős Memorial Lecture).

Special Sessions

Advances in Algebraic Coding Theory (Code: SS 6A), **Heide Gluesing-Luerssen**, University of Kentucky, and **Jon-Lark Kim**, University of Louisville.

Advances in Algebraic Statistics (Code: SS 2A), **Sonja Petrović**, University of Illinois, Chicago, and **Ruriko Yoshida**, University of Kentucky.

Combinatorial Algebra (Code: SS 7A), **Juan C. Migliore**, University of Notre Dame, and **Uwe Nagel**, University of Kentucky.

Commutative Algebra (Code: SS 1A), **Alberto Corso**, University of Kentucky, **Claudia Polini**, University of Notre Dame, and **Bernd Ulrich**, Purdue University.

Complex Analysis and Potential Theory (Code: SS 4A), **James E. Brennan** and **Vladimir Eiderman**, University of Kentucky.

Function Theory, Harmonic Analysis, and Partial Differential Equations (Code: SS 5A), **Joel Kilty**, Centre College, **Irina Mitrea**, Worcester Polytechnic Institute, and **Katharine Ott**, University of Kentucky.

Geometric Function Theory and Analysis on Metric Spaces (Code: SS 3A), **John L. Lewis**, University of Kentucky, and **Nageswari Shanmugalingam**, University of Cincinnati.

St. Paul, Minnesota

Macalester College

April 10–11, 2010

Saturday – Sunday

Meeting #1058

Central Section

Associate secretary: Georgia Benkart

Announcement issue of *Notices*: February 2010

Program first available on AMS website: February 25, 2010

Program issue of electronic *Notices*: April 2010

Issue of *Abstracts*: Volume 31, Issue 2

Deadlines

For organizers: September 10, 2009

For consideration of contributed papers in Special Sessions: December 22, 2009

For abstracts: February 16, 2010

The scientific information listed below may be dated. For the latest information, see www.ams.org/amsmtgs/sectional.html.

Invited Addresses

Charles Doering, University of Michigan, *Title to be announced.*

Vladimir Touraev, University of Indiana, *Title to be announced.*

Peter Webb, University of Minnesota, *Title to be announced.*

Special Sessions

Quantum Invariants of 3-manifolds and Modular Categories (Code: SS 1A), **Thang Le**, Georgia Institute of Technology, **Eric Rowell**, Texas A&M University, and **Vladimir Touraev**, Indiana University.

Albuquerque, New Mexico

University of New Mexico

April 17–18, 2010

Saturday – Sunday

Meeting #1059

Western Section

Associate secretary: Michel L. Lapidus

Announcement issue of *Notices*: February 2010

Program first available on AMS website: March 4, 2010

Program issue of electronic *Notices*: April 2010

Issue of *Abstracts*: Volume 31, Issue 3

Deadlines

For organizers: September 17, 2009

For consideration of contributed papers in Special Sessions: December 29, 2009

For abstracts: February 23, 2010

The scientific information listed below may be dated. For the latest information, see www.ams.org/amsmtgs/sectional.html.

Invited Addresses

Kenneth Bromberg, University of Utah, *Title to be announced.*

Danny Calegari, California Institute of Technology, *Title to be announced.*

Ioana Dumitriu, University of Washington, *Title to be announced.*

Steffen Rhode, University of Washington, *Title to be announced.*

Newark, New Jersey

New Jersey Institute of Technology

May 22–23, 2010

Saturday – Sunday

Meeting #1060

Eastern Section

Associate secretary: Steven H. Weintraub

Announcement issue of *Notices*: February 2010

Program first available on AMS website: April 8, 2010

Program issue of electronic *Notices*: May

Issue of *Abstracts*: Volume 31, Issue 3

Deadlines

For organizers: November 23, 2009

For consideration of contributed papers in Special Sessions: February 2, 2010

For abstracts: March 30, 2010

Berkeley, California

University of California Berkeley

June 2–5, 2010

Wednesday – Saturday

Meeting #1061

Eighth Joint International Meeting of the AMS and the Sociedad Matemática Mexicana.

Associate secretary: Susan J. Friedlander

Announcement issue of *Notices*: February 2010

Program first available on AMS website: April 22, 2010

Program issue of electronic *Notices*: June 2010

Issue of *Abstracts*: Volume 31, Issue 3

Deadlines

For organizers: November 3, 2009

For consideration of contributed papers in Special Sessions: February 16, 2010

For abstracts: April 13, 2010

The scientific information listed below may be dated. For the latest information, see www.ams.org/amsmtgs/internmtgs.html.

Invited Addresses

Alejandro Adem, University of British Columbia and PIMS, *Title to be announced.*

Peter W-K Li, University of California Irvine, *Title to be announced.*

Ernesto Lupercio, CINVESTAV, *Title to be announced.*

Victor Perez Abreu, CIMAT, *Title to be announced.*

Alberto Verjovsky, IM-UNAM, *Title to be announced.*

Maciej Zworski, University of California Berkeley, *Title to be announced.*

Special Sessions

Analytic Aspects of Differential Geometry (Code: SS 2A), **Lizhen Ji**, University of Michigan, and **Jiaping Wang**, University of Minnesota.

Harmonic Analysis, Microlocal Analysis, and Partial Differential Equations (Code: SS 1A), **Gunther Uhlmann**, University of Washington, and **Salvador Perez Esteva**, UNAM.

Syracuse, New York

Syracuse University

October 2–3, 2010

Saturday – Sunday

Meeting #1062

Eastern Section

Associate secretary: Steven H. Weintraub

Announcement issue of *Notices*: To be announced

Program first available on AMS website: August 19, 2010

Program issue of electronic *Notices*: October

Issue of *Abstracts*: Volume 31, Issue 4

Deadlines

For organizers: March 2, 2010

For consideration of contributed papers in Special Sessions: June 15, 2010

For abstracts: August 10, 2010

Los Angeles, California

University of California Los Angeles

October 9–10, 2010

Saturday – Sunday

Meeting #1063

Western Section

Associate secretary: Michel L. Lapidus

Announcement issue of *Notices*: August 2010

Program first available on AMS website: August 26, 2010

Program issue of electronic *Notices*: October 2010

Issue of *Abstracts*: Volume 31, Issue 4

Deadlines

For organizers: March 10, 2010

For consideration of contributed papers in Special Sessions: June 22, 2010

For abstracts: August 17, 2010

The scientific information listed below may be dated. For the latest information, see www.ams.org/amsmtgs/sectional.html.

Invited Addresses

Greg Kuperberg, University of California Davis, *Title to be announced.*

Cris Moore, University of New Mexico, *Title to be announced.*

Stanley Osher, University of California Los Angeles, *Title to be announced.*

Terence Tao, University of California Los Angeles, *Title to be announced* (Einstein Public Lecture in Mathematics).

Melanie Wood, Princeton University, *Title to be announced.*

Special Sessions

Large Cardinals and the Continuum (Code: SS 2A), **Matthew Foreman**, University of California Irvine, **Alekos Kechris**, California Institute of Technology, **Itay Neeman**, University of California Los Angeles, and **Martin Zeman**, University of California Irvine.

Topology and Symplectic Geometry (Code: SS 1A), **Robert Brown** and **Ciprian Manolescu**, University of California Los Angeles, and **Stefano Vidussi**, University of California Riverside.

Notre Dame, Indiana

Notre Dame University

October 29–31, 2010

Friday – Sunday

Meeting #1064

Central Section

Associate secretary: Georgia Benkart

Announcement issue of *Notices*: August 2010

Program first available on AMS website: September 16, 2010

Program issue of electronic *Notices*: October 2010

Issue of *Abstracts*: Volume 31, Issue 4

Deadlines

For organizers: February 19, 2010

For consideration of contributed papers in Special Sessions: July 20, 2010

For abstracts: September 7, 2010

The scientific information listed below may be dated. For the latest information, see www.ams.org/amsmtgs/sectional.html.

Invited Addresses

Laura DeMarco, University of Illinois at Chicago, *Title to be announced.*

David Fisher, Indiana University, *Title to be announced.*

Jared Wunsch, Northwestern University, *Title to be announced.*

Richmond, Virginia

University of Richmond

November 6–7, 2010

Saturday – Sunday

Meeting #1065

Southeastern Section

Associate secretary: Matthew Miller

Announcement issue of *Notices*: September

Program first available on AMS website: September 23, 2010

Program issue of electronic *Notices*: November

Issue of *Abstracts*: Volume 31, Issue 4

Deadlines

For organizers: March 8, 2010

For consideration of contributed papers in Special Sessions: July 27, 2010

For abstracts: September 14, 2010

New Orleans, Louisiana

New Orleans Marriott and Sheraton New Orleans Hotel

January 5–8, 2011

Wednesday – Saturday

Joint Mathematics Meetings, including the 117th Annual Meeting of the AMS, 94th Annual Meeting of the Mathematical Association of America, annual meetings of the Association for Women in Mathematics (AWM) and the National Association of Mathematicians (NAM), and the winter meeting of the Association for Symbolic Logic (ASL), with sessions contributed by the Society for Industrial and Applied Mathematics (SIAM).

Associate secretary: Steven H. Weintraub

Announcement issue of *Notices*: October 2010

Program first available on AMS website: November 1, 2010

Program issue of electronic *Notices*: January 2011

Issue of *Abstracts*: Volume 32, Issue 1

Deadlines

For organizers: April 1, 2010

For consideration of contributed papers in Special Sessions: To be announced

For abstracts: To be announced

Statesboro, Georgia

Georgia Southern University

March 12–13, 2011

Saturday – Sunday

Southeastern Section

Associate secretary: Matthew Miller

Announcement issue of *Notices*: To be announced

Program first available on AMS website: To be announced

Program issue of electronic *Notices*: To be announced

Issue of *Abstracts*: To be announced

Deadlines

For organizers: August 12, 2010

For consideration of contributed papers in Special Sessions: To be announced

For abstracts: To be announced

Iowa City, Iowa

University of Iowa

March 18–20, 2011

Friday – Sunday

Central Section

Associate secretary: Georgia Benkart

Announcement issue of *Notices*: To be announced

Program first available on AMS website: To be announced

Program issue of electronic *Notices*: To be announced

Issue of *Abstracts*: To be announced

Deadlines

For organizers: July 16, 2010

For consideration of contributed papers in Special Sessions: To be announced

For abstracts: To be announced

Worcester, Massachusetts

College of the Holy Cross

April 9–10, 2011

Saturday – Sunday

Eastern Section

Associate secretary: Steven H. Weintraub

Announcement issue of *Notices*: To be announced

Program first available on AMS website: To be announced

Program issue of electronic *Notices*: To be announced

Issue of *Abstracts*: To be announced

Deadlines

For organizers: September 9, 2010

For consideration of contributed papers in Special Sessions: To be announced

For abstracts: To be announced

Boston, Massachusetts

John B. Hynes Veterans Memorial Convention Center, Boston Marriott Hotel, and Boston Sheraton Hotel

January 4–7, 2012

Wednesday – Saturday

Joint Mathematics Meetings, including the 118th Annual Meeting of the AMS, 95th Annual Meeting of the Mathematical Association of America, annual meetings of the Association for Women in Mathematics (AWM) and the National Association of Mathematicians (NAM), and the winter meeting of the Association for Symbolic Logic (ASL), with sessions contributed by the Society for Industrial and Applied Mathematics (SIAM).

Associate secretary: Michel L. Lapidus

Announcement issue of *Notices*: October 2011

Program first available on AMS website: November 1, 2011

Program issue of electronic *Notices*: January 2012

Issue of *Abstracts*: Volume 33, Issue 1

Deadlines

For organizers: April 1, 2011

For consideration of contributed papers in Special Sessions: To be announced

For abstracts: To be announced

San Diego, California

San Diego Convention Center and San Diego Marriott Hotel and Marina

January 9–12, 2013

Wednesday – Saturday

Joint Mathematics Meetings, including the 119th Annual Meeting of the AMS, 96th Annual Meeting of the Mathematical Association of America, annual meetings of the Association for Women in Mathematics (AWM) and the National Association of Mathematicians (NAM), and the winter meeting of the Association for Symbolic Logic (ASL), with sessions contributed by the Society for Industrial and Applied Mathematics (SIAM).

Associate secretary: Georgia Benkart

Announcement issue of *Notices*: October 2012

Program first available on AMS website: November 1, 2012

Program issue of electronic *Notices*: January 2012

Issue of *Abstracts*: Volume 34, Issue 1

Deadlines

For organizers: April 1, 2012

For consideration of contributed papers in Special Sessions: To be announced

For abstracts: To be announced

Baltimore, Maryland

Baltimore Convention Center, Baltimore Hilton, and Marriott Inner Harbor

January 15–18, 2014

Wednesday – Saturday

Joint Mathematics Meetings, including the 120th Annual Meeting of the AMS, 97th Annual Meeting of the Mathematical Association of America, annual meetings of the Association for Women in Mathematics (AWM) and the National Association of Mathematicians (NAM), and the winter meeting of the Association for Symbolic Logic, with sessions contributed by the Society for Industrial and Applied Mathematics (SIAM).

Associate secretary: Matthew Miller

Announcement issue of *Notices*: October 2013

Program first available on AMS website: November 1, 2013

Program issue of electronic *Notices*: January 2013

Issue of *Abstracts*: Volume 35, Issue 1

Deadlines

For organizers: April 1, 2013

For consideration of contributed papers in Special Sessions: To be announced

For abstracts: To be announced

San Antonio, Texas

Henry B. Gonzalez Convention Center and Grand Hyatt San Antonio

January 10–13, 2015

Saturday – Tuesday

Joint Mathematics Meetings, including the 121st Annual Meeting of the AMS, 98th Annual Meeting of the Mathematical Association of America, annual meetings of the Association for Women in Mathematics (AWM) and the National Association of Mathematicians (NAM), and the winter meeting of the Association of Symbolic Logic, with sessions contributed by the Society for Industrial and Applied Mathematics (SIAM).

Associate secretary: Steven H. Weintraub

Announcement issue of *Notices*: October 2014

Program first available on AMS website: To be announced

Program issue of electronic *Notices*: January 2015

Issue of *Abstracts*: Volume 36, Issue 1

Deadlines

For organizers: April 1, 2014

For consideration of contributed papers in Special Sessions: To be announced

For abstracts: To be announced

Seattle, Washington

Washington State Convention & Trade Center and the Sheraton Seattle Hotel

January 6–9, 2016

Wednesday – Saturday

Joint Mathematics Meetings, including the 122nd Annual Meeting of the AMS, 99th Annual Meeting of the Mathematical Association of America, annual meetings of the Association for Women in Mathematics (AWM) and the National Association of Mathematicians (NAM), and the winter meeting of the Association of Symbolic Logic, with sessions contributed by the Society for Industrial and Applied Mathematics (SIAM).

Associate secretary: Michel L. Lapidus

Announcement issue of *Notices*: October 2015

Program first available on AMS website: To be announced

Program issue of electronic *Notices*: January 2016

Issue of *Abstracts*: Volume 37, Issue 1

Deadlines

For organizers: April 1, 2015

For consideration of contributed papers in Special Sessions: To be announced

For abstracts: To be announced

Atlanta, Georgia

Hyatt Regency Atlanta and Marriott Atlanta Marquis

January 4–7, 2017

Wednesday – Saturday

Joint Mathematics Meetings, including the 123rd Annual Meeting of the AMS, 100th Annual Meeting of the Mathematical Association of America, annual meetings of the Association for Women in Mathematics (AWM) and the National Association of Mathematicians (NAM), and the winter meeting of the Association of Symbolic Logic, with sessions contributed by the Society for Industrial and Applied Mathematics (SIAM).

Associate secretary: Georgia Benkart

Announcement issue of *Notices*: October 2016

Program first available on AMS website: To be announced

Program issue of electronic *Notices*: January 2017

Issue of *Abstracts*: Volume 38, Issue 1

Deadlines

For organizers: April 1, 2016

For consideration of contributed papers in Special Sessions: To be announced

For abstracts: To be announced