

MEETINGS & CONFERENCES OF THE AMS

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The Meetings and Conferences section of the Notices gives information on all AMS meetings and conferences approved by press time for this issue. Please refer to the page numbers cited on this page for more detailed information on each event. Invited Speakers and Special Sessions are listed as soon as they are approved by the cognizant program committee; the codes listed are needed for electronic abstract submission. For some meetings the list may be incomplete. Information in this issue may be dated.

The most up-to-date meeting and conference information can be found online at: www.ams.org/meetings/.

Important Information About AMS Meetings: Potential organizers, speakers, and hosts should refer to page 75 in the January 2017 issue of the *Notices* for general information regarding participation in AMS meetings and conferences.

Abstracts: Speakers should submit abstracts on the easy-to-use interactive Web form. No knowledge of \LaTeX is

necessary to submit an electronic form, although those who use \LaTeX may submit abstracts with such coding, and all math displays and similarly coded material (such as accent marks in text) must be typeset in \LaTeX . Visit www.ams.org/cgi-bin/abstracts/abstract.pl/. Questions about abstracts may be sent to abs-info@ams.org. Close attention should be paid to specified deadlines in this issue. Unfortunately, late abstracts cannot be accommodated.

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See www.ams.org/meetings/ for the most up-to-date information on these conferences.

ASSOCIATE SECRETARIES OF THE AMS

Central Section: Georgia Benkart, University of Wisconsin-Madison, Department of Mathematics, 480 Lincoln Drive, Madison, WI 53706-1388; e-mail: benkart@math.wisc.edu; telephone: 608-263-4283.

Eastern Section: Steven H. Weintraub, Department of Mathematics, Lehigh University, Bethlehem, PA 18015-3174; e-mail: steve.weintraub@lehigh.edu; telephone: 610-758-3717.

Southeastern Section: Brian D. Boe, Department of Mathematics, University of Georgia, 220 D W Brooks Drive, Athens, GA 30602-7403, e-mail: brian@math.uga.edu; telephone: 706-542-2547.

Western Section: Michel L. Lapidus, Department of Mathematics, University of California, Surge Bldg., Riverside, CA 92521-0135; e-mail: lapidus@math.ucr.edu; telephone: 951-827-5910.

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 www.ams.org/meetings/.

Final programs for Sectional Meetings will be archived on the AMS website accessible from the stated URL .

Charleston, South Carolina

College of Charleston

March 10–12, 2017

Friday – Sunday

Meeting #1126

Southeastern Section

Associate secretary: Brian D. Boe

Announcement issue of *Notices*: To be announced

Program first available on AMS website: To be announced

Issue of *Abstracts*: Volume 38, Issue 2

Deadlines

For organizers: Expired

For abstracts: January 17, 2017

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

Invited Addresses

Pramod N. Achar, Louisiana State University, *Representations of algebraic groups via algebraic topology*.

Hubert L Bray, Duke University, *The Geometry of Special and General Relativity*.

Alina Chertock, North Carolina State University, *Numerical methods for chemotaxis and related models*.

Special Sessions

If you are volunteering to speak in a Special Session, you should send your abstract as early as possible via the

abstract submission form found at www.ams.org/cgi-bin/abstracts/abstract.pl.

Active Learning in Undergraduate Mathematics (Code: SS 21A), **Draga Vidakovic**, Georgia State University, **Harrison Stalvey**, University of Colorado, Boulder, and **Darryl Chamberlain, Jr.**, **Aubrey Kemp**, and **Leslie Meadows**, Georgia State University.

Advances in Long-term Behavior of Nonlinear Dispersive Equations (Code: SS 27A), **Brian Pigott**, Wofford College, and **Sarah Raynor**, Wake Forest University.

Advances in Nonlinear Waves: Theory and Applications (Code: SS 23A), **Constance M. Schober**, University of Central Florida, and **Andrei Ludu**, Embry Riddle University.

Algebras, Lattices, Varieties (Code: SS 19A), **George F. McNulty**, University of South Carolina, and **Kate S. Owens**, College of Charleston.

Analysis and Control of Fluid-Structure Interactions and Fluid-Solid Mixtures (Code: SS 6A), **Justin T. Webster**, College of Charleston, and **Daniel Toundykov**, University of Nebraska-Lincoln.

Analysis, Control and Stabilization of PDE's (Code: SS 13A), **George Avalos**, University of Nebraska-Lincoln, and **Scott Hansen**, Iowa State University.

Bicycle Track Mathematics (Code: SS 25A), **Ron Perline**, Drexel University.

Coding Theory, Cryptography, and Number Theory (Code: SS 17A), **Jim Brown**, **Shuhong Gao**, **Kevin James**, **Felice Manganiello**, and **Gretchen Matthews**, Clemson University.

Commutative Algebra (Code: SS 1A), **Bethany Kubik**, University of Minnesota Duluth, **Saeed Nasseh**, Georgia Southern University, and **Sean Sather-Wagstaff**, Clemson University.

Computability in Algebra and Number Theory (Code: SS 8A), **Valentina Harizanov**, The George Washington

University, **Russell Miller**, Queens College and Graduate Center—City University of New York, and **Alexandra Shlapentokh**, East Carolina University.

Data Analytics and Applications (Code: SS 2A), **Scott C. Batson**, **Lucas A. Overbuy**, and **Bryan Williams**, Space and Naval Warfare Systems Center Atlantic.

Factorization and Multiplicative Ideal Theory (Code: SS 16A), **Jim Coykendall**, Clemson University, and **Evan Houston** and **Thomas G. Lucas**, University of North Carolina, Charlotte.

Fluid-Boundary Interactions (Code: SS 26A), **M. Nick Moore**, Florida State University.

Frame Theory (Code: SS 22A), **Dustin Mixon**, Air Force Institute of Technology, **John Jasper**, University of Cincinnati, and **James Solazzo**, Coastal Carolina University.

Free-boundary Fluid Models and Related Problems (Code: SS 7A), **Marcelo Disconzi**, Vanderbilt University, and **Lorena Bociu**, North Carolina State University.

Geometric Analysis and General Relativity (Code: SS 20A), **Hubert L. Bray**, Duke University, **Otis Chodosh**, Princeton University, and **Greg Galloway** and **Pengzi Miao**, University of Miami.

Geometric Methods in Representation Theory (Code: SS 15A), **Pramod N. Achar**, Louisiana State University, and **Amber Russell**, Butler University.

Geometry and Symmetry in Integrable Systems (Code: SS 10A), **Annalisa Calini**, **Alex Kasman**, and **Thomas Ivey**, College of Charleston.

Graph Theory (Code: SS 5A), **Colton Magnant**, Georgia Southern University, and **Zixia Song**, University of Central Florida.

Knot Theory and its Applications (Code: SS 3A), **Elizabeth Denne**, Washington & Lee University, and **Jason Parsley**, Wake Forest University.

Nonlinear Waves: Analysis and Numerics (Code: SS 18A), **Anna Ghazaryan**, Miami University, **St é phane Lafortune**, College of Charleston, and **Vahagn Manukian**, Miami University.

Numerical Methods for Coupled Problems in Computational Fluid Dynamics (Code: SS 11A), **Vincent J. Ervin** and **Hyesuk Lee**, Clemson University.

Oscillator Chain and Lattice Models in Optics, the Power Grid, Biology, and Polymer Science (Code: SS 14A), **Alejandro Aceves**, Southern Methodist University, and **Brenton LeMesurier**, College of Charleston.

Recent Trends in Finite Element Methods (Code: SS 9A), **Michael Neilan**, University of Pittsburgh, and **Leo Rebholz**, Clemson University.

Representation Theory and Algebraic Mathematical Physics (Code: SS 12A), **Iana I. Anguelova**, **Ben Cox**, and **Elizabeth Jurisich**, College of Charleston.

Riemann-Hilbert Problem Approach to Asymptotic Problems in Integrable Systems, Orthogonal Polynomials and Other Areas (Code: SS 24A), **Alexander Tovbis**, University of Central Florida, and **Robert Jenkins**, University of Arizona.

Rigidity Theory and Inversive Distance Circle Packings (Code: SS 4A), **John C. Bowers**, James Madison University, and **Philip L. Bowers**, The Florida State University.

Bloomington, Indiana

Indiana University

April 1–2, 2017

Saturday – Sunday

Meeting #1127

Central Section

Associate secretary: Georgia Benkart

Announcement issue of *Notices*: February 2017

Program first available on AMS website: February 23, 2017

Issue of *Abstracts*: Volume 38, Issue 2

Deadlines

For organizers: Expired

For abstracts: February 7, 2017

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

Invited Addresses

Ciprian Demeter, Indiana University, *Title to be announced.*

Sarah Koch, University of Michigan, *Title to be announced.*

Richard Evan Schwartz, Brown University, *Modern scratch paper: Graphical explorations in geometry and dynamics* (Einstein Public Lecture in Mathematics).

Special Sessions

If you are volunteering to speak in a Special Session, you should send your abstract as early as possible via the abstract submission form found at www.ams.org/cgi-bin/abstracts/abstract.pl.

Algebraic and Enumerative Combinatorics with Applications (Code: SS 6A), **Saúl A. Blanco**, Indiana University, and **Kyle Peterson**, DePaul University.

Analysis and Numerical Computations of PDEs in Fluid Mechanics (Code: SS 20A), **Gung-Min Gie**, University of Louisville, and **Makram Hamouda** and **Roger Temam**, Indiana University.

Analysis of Variational Problems and Nonlinear Partial Differential Equations (Code: SS 11A), **Nam Q. Le** and **Peter Sternberg**, Indiana University.

Automorphic Forms and Algebraic Number Theory (Code: SS 2A), **Patrick B. Allen**, University of Illinois at Urbana-Champaign, and **Matthias Strauch**, Indiana University Bloomington.

Commutative Algebra (Code: SS 19A), **Ela Celikbas** and **Olgur Celikbas**, West Virginia University.

Computability and Inductive Definability over Structures (Code: SS 3A), **Siddharth Bhaskar**, **Lawrence Valby**, and **Alex Kruckman**, Indiana University.

Dependence in Probability and Statistics (Code: SS 7A), **Richard C. Bradley** and **Lanh T. Tran**, Indiana University.

Differential Equations and Their Applications to Biology (Code: SS 27A), **Changbing Hu**, **Bingtuan Li**, and **Jiaxu Li**, University of Louisville.

Discrete Structures in Conformal Dynamics and Geometry (Code: SS 5A), **Sarah Koch**, University of Michigan, and **Kevin Pilgrim** and **Dylan Thurston**, Indiana University.

Extremal Problems in Graphs, Hypergraphs and Other Combinatorial Structures (Code: SS 25A), **Amin Bahmanian**, Illinois State University, and **Theodore Molla**, University of Illinois Urbana-Champaign.

Financial Mathematics and Statistics (Code: SS 24A), **Ryan Gill**, University of Louisville, **Rasitha Jayasekera**, Butler University, and **Kiseop Lee**, Purdue University.

Fusion Categories and Applications (Code: SS 26A), **Paul Bruillard**, Pacific Northwest National Laboratory, and **Julia Plavnik** and **Eric Rowell**, Texas A&M University.

Harmonic Analysis and Partial Differential Equations (Code: SS 9A), **Lucas Chaffee**, Western Washington University, **William Green**, Rose-Hulman Institute of Technology, and **Jarod Hart**, University of Kansas.

Homotopy Theory (Code: SS 12A), **David Gepner**, Purdue University, **Ayelet Lindenstrauss** and **Michael Mandell**, Indiana University, and **Daniel Ramras**, Indiana University-Purdue University Indianapolis.

Model Theory (Code: SS 14A), **Gabriel Conant**, University of Notre Dame, and **Philipp Hieronymi**, University of Illinois Urbana Champaign.

Multivariate Operator Theory and Function Theory (Code: SS 21A), **Hari Bercovici**, Indiana University, **Kelly Bickel**, Bucknell University, **Constanze Liaw**, Baylor University, and **Alan Sola**, Stockholm University.

Network Theory (Code: SS 8A), **Jeremy Alm** and **Keenan M.L. Mack**, Illinois College.

Nonlinear Elliptic and Parabolic Partial Differential Equations and Their Various Applications (Code: SS 13A), **Changyou Wang**, Purdue University, and **Yifeng Yu**, University of California, Irvine.

Probabilistic Methods in Combinatorics (Code: SS 22A), **Patrick Bennett** and **Andrzej Dudek**, Western Michigan University.

Probability and Applications (Code: SS 16A), **Russell Lyons** and **Nick Travers**, Indiana University.

Randomness in Complex Geometry (Code: SS 1A), **Turğay Bayraktar**, Syracuse University, and **Norman Levenberg**, Indiana University.

Representation Stability and its Applications (Code: SS 23A), **Patricia Hersh**, North Carolina State University, **Jeremy Miller**, Purdue University, and **Andrew Putman**, University of Notre Dame.

Representation Theory and Integrable Systems (Code: SS 18A), **Eugene Mukhin**, Indiana University, Purdue University Indianapolis, and **Vitaly Tarasov**, Indiana University, Purdue University Indianapolis.

Self-similarity and Long-range Dependence in Stochastic

Processes (Code: SS 10A), **Takashi Owada**, Purdue University, **Yi Shen**, University of Waterloo, and **Yizao Wang**, University of Cincinnati.

Spectrum of the Laplacian on Domains and Manifolds (Code: SS 4A), **Chris Judge** and **Sugata Mondal**, Indiana University.

Topics in Extremal, Probabilistic and Structural Graph Theory (Code: SS 15A), **John Engbers**, Marquette University, and **David Galvin**, University of Notre Dame.

Topological Mathematical Physics (Code: SS 17A), **E. Birgit Kaufmann** and **Ralph M. Kaufmann**, Purdue University, and **Emil Prodan**, Yeshiva University.

Accommodations

Participants should make their own arrangements directly with the hotel of their choice. Special discounted rates were negotiated with the hotels listed below. Rates quoted do not include the Indiana state hotel tax (12%). Participants must state that they are with the **American Mathematical Society (AMS) Meeting at Indiana University** to receive the discounted rate. The AMS is not responsible for rate changes or for the quality of the accommodations. **Hotels have varying cancellation and early checkout penalties; be sure to ask for details.**

Courtyard Bloomington, 310 S. College Avenue, Bloomington, Indiana 47403; 812-335-8000; <http://www.marriott.com/hotels/travel/bmgcy-courtyard-bloomington/?scid=bb1a189a-fec3-4d19-a255-54ba596febe2>. Rates are US\$169 per night, these rates are applicable for single or double occupancy. Amenities include complementary wireless Internet; coffee; morning newspaper; indoor pool; whirlpool; complimentary parking on-site; and a well-equipped fitness room. This property is about a 13-minute walk from campus. Cancellation and early check-out policies vary and penalties exist at this property; be sure to check when you make your reservation. The deadline for reservations at this rate is **February 28, 2017**.

Hilton Garden Inn, Bloomington, 245 North College Ave., Bloomington, IN 47404; 812-331-1335; hiltongardeninn3.hilton.com/en/hotels/indiana/hilton-garden-inn-bloomington-BMGINGI/index.html. Rates are US\$189 per night for a single or double occupancy, king or double-queen room. Amenities include complimentary Wi-Fi; indoor pool; fitness center; business center; and on-site full-service restaurant. Rooms are furnished with a fridge/microwave and the hotel offers a 24-hour Pavilion Pantry for last-minute snacks and necessities. Self-parking is available at US\$10 per day. This property is located approximately a half mile from campus. Cancellation and early check-out policies vary and penalties exist at this property; be sure to check when you make your reservation. The deadline for reservations at this rate is **March 1, 2017**.

Hyatt Place Bloomington, 217 West Kirkwood Ave., Bloomington, IN 47404; 812-339-5950; <https://bloomington.place.hyatt.com/en/hotel/home.html>.

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Rates are **US\$159** per night for single or double occupancy room. Amenities include complimentary Wi-Fi; on-site Coffee to Cocktails Bar serving specialty Starbucks® coffee, local beer choices, wine and cocktails; and complimentary A.M. Kitchen Skillet™ featuring freshly prepared breakfast sandwiches, steel-cut oatmeal, fresh cut fruit and more, available daily in the Guest Kitchen. Self-parking is available at US\$10 per day. This property is a 10-minute walk to Indiana University. Cancellation and early check-out policies vary and penalties exist at this property; be sure to check when you make your reservation. The deadline for reservations at a reduced rate is **March 1, 2017**.

Indiana Memorial Union Biddle Hotel, 900 E. Seventh Street, Bloomington, IN 47405; 1-800-209-8145 or 812-856-6381; <https://imu.indiana.edu/hotel/>. Rates for king and double queen rooms are **US\$189** per night and rates for single queen rooms are **US\$139** per night. Overnight guests of the Biddle Hotel enjoy complimentary self-parking in both pay lots adjacent to the building. Both lots are open from 7 am to midnight, seven days a week. The Indiana Memorial Union is located on the Indiana University campus and amenities include numerous on-site dining options; 24-hour fitness center; bell service; and room service. Cancellation and early check-out policies vary and penalties exist at this property; be sure to check when you make your reservation. Individuals can make reservations by calling 800-209-8145 or 812-855-2536. For online reservations please visit www.imu.indiana.edu, click "Biddle Hotel", click "accommodations", scroll down to "reserve a room", enter desired arrival / departure dates, and enter group code: AMS17. The deadline for reservations at a reduced rate is **March 1, 2017**.

America's Best Value Inn, 1722 North Walnut Street, Bloomington, IN 47404; 812-339-1919; www.americasbestvalueinn.com/bestv.cfm?idp=1893. This property is offering special rates to meeting participants. Rates are **US\$50** per night for a room with a single bed or **US\$60** for a room with double beds; this rate is applicable for single or double occupancy. Amenities include free continental breakfast; free wireless high-speed Internet access; mini-fridge; cable TV with HBO and ESPN; clock radio; free local calls; free long distance within the US; and wake-up service. This property is located approximately 1.5 miles from campus. Cancellation and early check-out policies vary and penalties exist at this property; be sure to check when you make your reservation.

Super 8 Motel, 1751 N Stonelake Dr, Bloomington, IN 47404; 812-323-8000; https://www.wyndhamhotels.com/super-8/bloomington-indiana/super-8-bloomington-in/overview?brand_id=SE&hotel_id=03195&referring_brand=SE&checkin_date=12/4/2016&checkout_date=12/5/2016&useWRPoints=false&rooms=1&adults=1&children=0&radius=25&brand_code=BH,DI,RA,BU,HJ,KG,MT,SE,TL,WG,WY,WT,WP&PriceFilter=0-2147483647. Rates are **US\$69.99** per night for a room with two beds; this rate is applicable for single

or double occupancy. All rooms include a microwave; refrigerator; hair dryer; iron and board; coffee maker; free Wi-Fi; complimentary continental breakfast; and indoor pool and spa. This property is about a 3 minute drive from campus. Cancellation and early check-out policies vary and penalties exist at this property; be sure to check when you make your reservation. The deadline for reservations at this rate is **March 17, 2017**.

Food Services

On Campus: The Indiana Memorial Union offers breakfast and lunch at *The Market* down the hall from the Frangipani lecture room. The IMU also offers a *Starbucks*, *Burger King* and other options in the food court.

Located on the lobby level of the Indiana Memorial Union, *the Circle Cafe* serves breakfast and lunch daily featuring bagels, sandwiches, *Starbucks*' coffee and fresh pastries. The cafe is open from 6:30 am to 2:00 pm on Fridays, Saturdays and Sundays.

Located on the main level of the Indiana Memorial Union, *the Sugar and Spice Bakery* serves specialty cookies, cakes, and other baked goods. The bakery is open from 8:00 am to 2:00 pm on Saturdays and Sundays.

Located on the first floor of the Indiana Memorial Union, *the Tudor Room* serves buffet lunch on weekdays and brunch from 10:30 am to 1:30 pm on Sundays. Reservations are encouraged but not required. To make a reservation, call 812-855-9866 or e-mail tudorrm@indiana.edu.

Off Campus: Downtown Bloomington is eight blocks away from campus. Kirkwood Ave and 4th Street both have numerous restaurants, including many fine ethnic restaurants. More information on restaurants and local attractions in the Bloomington area can be found at <https://www.visitbloomington.com/restaurants/>.

Some options for coffee include:

Hopscotch Coffee, 235 W. Dodds St, Bloomington; (812) 369-4811; <https://www.visitbloomington.com/listing/hopscotch-coffee/1529/>; serving ethically sourced, locally roasted coffee.

Pourhouse Cafe, 314 E. Kirkwood Ave, Bloomington; (207) 812-339-7000; <https://www.visitbloomington.com/listing/pourhouse-caf%3a9/1314/>; serving locally roasted coffee from all over the world.

Some options nearby for dining include:

Big Woods Bloomington, 116 Grant St, Bloomington; 812-335-1821; <https://www.visitbloomington.com/listing/big-woods-bloomington/1477/>; a different kind of taproom, focused on a complete experience.

BTown Diner, 211 N. Walnut, Bloomington; 812-822-0300; <https://www.visitbloomington.com/listing/btown-diner/1483/>; a traditional diner with some flair. Open all night, breakfast and lunch.

Bub's Burgers and Ice Cream, 480 N. Morton St., Bloomington; 812-331-2827; <https://www.visitbloomington.com/listing/bubs-burgers-and-ice-cream/1471/>; serving quality food, burgers, and ice cream.

Buffalouie's, 114 S. Indiana Ave, Bloomington; 812-333-3030; <https://www.visitbloomington.com/listing/buffalouies/1467/>; serving iconic wings, burgers, sandwiches, and salads in an historic setting.

Cafe Pizzeria, 405 E. Kirkwood Ave, Bloomington; 812-332-2111; <https://www.visitbloomington.com/listing/cafe-pizzeria/613/>; Bloomington's first pizzeria with pizza, stromboli, and hot submarines.

Carson's BBQ, 5555 W. SR 46, Bloomington; 812-876-8227; <https://www.visitbloomington.com/listing/carsons-bbq/1502/>; serving smoked BBQ pork, beef and chicken, plus traditional sides.

Registration and Meeting Information

Advance Registration: Advance registration for this meeting opens on **January 19, 2017**. Advance registration fees will be US\$59 for AMS members, US\$85 for nonmembers, and US\$10 for students, unemployed mathematicians, and emeritus members. Participants may cancel registrations made in advance by e-mailing mmsb@ams.org. The deadline to cancel is the first day of the meeting.

On-site Information and Registration: The registration desk, AMS book exhibit, and coffee service will be located on the first floor of Ballantine Hall. The Invited Addresses, Special Sessions and Contributed Paper Sessions will take place in classrooms which will be in Ballantine Hall and Woodburn Hall. Please look for additional information about specific session room locations on the web and in the printed program. For further information on building locations, a campus map is available at <https://www.indiana.edu/about/map.html>.

The registration desk will be open on Saturday, April 1, 7:30 am–4:00 pm. and Sunday, April 2, 8:00 am–12:00 pm. The same fees apply for on-site registration, as for advance registration. Fees are payable on-site via cash, check, or credit card.

Other Activities

Book Sales: Stop by the on-site AMS bookstore to review the newest publications and take advantage of exhibit discounts and free shipping on all on-site orders! AMS members receive 40 percent off list price. Nonmembers receive a 25 percent discount. Not a member? Ask a representative about the benefits of AMS membership.

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 wish to discuss with the AMS, please stop by the book exhibit.

Einstein Lecture: Indiana University will host an AMS Einstein Public Lecture in Mathematics on Saturday evening in Woodburn Hall Room 100 at 5:15 pm. **Richard Evan**

Schwartz from Brown University will give a talk entitled, *Modern Scratch Paper: Graphical Explorations in Geometry and Dynamics*. This event is open to the public. Reception to follow.

Information about this lecture can be found at www.ams.org/meetings/sectional/2233_events.html

Special Needs

It is the goal of the AMS to ensure that its conferences are accessible to all, regardless of disability. The AMS will strive, unless it is not practicable, to choose venues that are fully accessible to the physically handicapped.

If special needs accommodations are necessary in order for you to participate in an AMS Sectional Meeting, please communicate your needs in advance to the AMS Meetings Department by:

- Registering early for the meeting
- Checking the appropriate box on the registration form, and
- Sending an e-mail request to the AMS Meetings Department at mmsb@ams.org or meet@ams.org.

AMS Policy on a Welcoming Environment

The AMS strives to ensure that participants in its activities enjoy a welcoming environment. In all its activities, the AMS seeks to foster an atmosphere that encourages the free expression and exchange of ideas. The AMS supports equality of opportunity and treatment for all participants, regardless of gender, gender identity, or expression, race, color, national or ethnic origin, religion or religious belief, age, marital status, sexual orientation, disabilities, or veteran status.

Local Information and Maps

This meeting will take place on the campus of Indiana University. A campus map can be found at map.iu.edu/iub/. Information about the Indiana University Mathematics Department can be found at www.math.indiana.edu/. Please visit the Indiana University website at <https://www.indiana.edu/> for additional information on the campus.

Please watch the AMS website at www.ams.org/meetings/sectional/sectional.html for additional information on this meeting.

Parking

Attendees electing to stay at off campus hotels who wish to drive to campus and park their car on campus may do so in the two parking lots adjacent to the Indiana Memorial Union. There will be a fee for parking in these lots. Discounted parking passes will be available at the registration desk for conference participants. The approximate discounted parking fee is currently US\$12/day.

Indiana University offers several free weekend parking options. Any vehicle may park in any CH or ST zone from 5 pm on Friday through 11 pm on Sunday, with or without a current parking permit. Parking is free in IU parking garages all day Saturday and Sunday and is free in most metered spaces from 10 pm Friday until 7 am Monday.

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The following three lots are free to anyone on weekday evenings after 5pm and over the weekend: Von Lee parking lot (lot #404), lot on the corner of Fourth and Dunn streets (lot #412), lot on the corner of Sixth and Dunn streets (lot #402).

These locations and additional information about parking on campus can be found here <https://parking.indiana.edu/parking-rules/free-parking.html>.

Travel

This meeting will take place on the main campus of Indiana University, located in the heart of Bloomington, Indiana.

By Air: The Indianapolis International Airport (IND) is served by most major airlines. Please visit the Indianapolis International Airport website for a list of airlines and lists of cities with daily direct flights; www.indianapolisairport.com/.

There are several options available for transportation to/from the airport. Taxi service is available at the curb on the lower level of the airport terminal just outside Baggage Claim. *Bloomington Shuttle Service, Inc* offers nine daily trips to and from the university campus and surrounding hotels and IND Airport. Advance reservations are required at a cost of US\$20.00. Please visit goexpresstravel.com/airport_shuttle_schedule for shuttle schedule information. *Star of America Shuttle Service* pricing starts at US\$18.00 when purchased on-line, US\$20.00 when purchased at the bus, or US\$36.00 round trip when purchased in advance on-line. Please visit www.soashuttle.com/locations/bloomington-to-indianapolis/ for shuttle schedule information.

Rental cars are also available at Indianapolis International Airport; for more details please visit business.ind.com/parking_transportation/rentalCar.aspx.

By Train: Rail service to Indiana is available through *Amtrak Train*. To book your trip please visit https://www.amtrak.com/servlet/ContentServer?pagename=am/am2Station/Station_Page&code=IND. The Indianapolis train station is located at 350 South Illinois Street and is approximately 50 miles from campus.

By Bus: Bus service to Bloomington is available on *Greyhound*. The Greyhound Bus Station is located in the Bloomington Transit Center located at 301 South Walnut St., Bloomington, IN. For more information on fares and schedules please visit www.greyhound.com or call 812-333-6400.

By Car:

From the south: Take IN-37 N toward Bloomington and exit IN-37 N onto W. Bloomfield Road. Continue onto W. Second Street then turn left on S. Henderson Street. Continue straight onto S. Indiana Avenue then turn right on E. Seventh Street.

From the north: Take IN-37 S toward Bloomington and exit IN-37 S onto IN-45 N/IN-46 E. Turn right on N. College Avenue then turn left on W. Seventh Street.

From the east: Take IN-46 W toward Bloomington and continue straight onto E. Third Street. Turn right on S. Indiana Avenue then turn right on E. Seventh Street.

From the west: Take IN-45 N/IN-46 E toward Bloomington. Turn right on N. College Avenue then turn left on E. Seventh Street.

Car Rental: Hertz is the official car rental company for the meeting. To make a reservation accessing our special meeting rates online at www.hertz.com, click on the box "I have a discount", and type in our convention number (CV): CV#04N30007. You can also call Hertz directly at 800-654-2240 (US and Canada) or 1-405-749-4434 (other countries). At the time of reservation, the meeting rates will be automatically compared to other Hertz rates and you will be quoted the best comparable rate available.

For directions to campus, inquire at your rental car counter.

Local Transportation

Walking, biking and personal cars are recommended to get around campus and Bloomington.

By Bus: *Bloomington Transit* provides convenient local transportation to Indiana University and area hotels. Bus routes and rates are available at bloomingtontransit.com/. Please visit bloomingtontransit.com/wp-content/uploads/2015/09/SystemMap2015front.pdf for the full area map with all bus routes. Regular fare costs US\$1 and exact change is required. Passes and tickets are for sale at two locations: the Transit Center at 3rd & Walnut and the main office at 130 West Grimes Lane. Payments can be made by cash, check, or credit card (Visa, MasterCard, and Discover). Bank cards are acceptable as credit only, not debit. The main office is open Monday through Friday between 8:00 am and 4:30 pm. The Transit Center is open M-F 6:45 am to 11:00 pm and Saturdays from 8:15 am to 6:30 pm. For more information call (812) 336-7433, (812) 330-7853 (TDD).

Weather:

The average high temperature for April is approximately 64 degrees Fahrenheit and the average low is approximately 42 degrees Fahrenheit. Visitors should be prepared for inclement weather and check weather forecasts in advance of their arrival.

Social Networking:

Attendees and speakers are encouraged to tweet about the meeting using the hashtags #AMSmtg.

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 travel.state.gov/content/travel/en.html. If you need a preliminary conference invitation in order to secure a visa, please send your request to cro@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 US 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 websites above for the most up-to-date information.

Pullman, Washington

Washington State University

April 22–23, 2017

Saturday – Sunday

Meeting #1128

Western Section

Associate secretary: Michel L. Lapidus

Announcement issue of *Notices*: February 2017

Program first available on AMS website: March 9, 2017

Issue of *Abstracts*: Volume 38, Issue 2

Deadlines

For organizers: Expired

For abstracts: February 28, 2017

The scientific information listed below may be dated. For the latest information, see www.ams.org/amsmtgs/section1.html.

Invited Addresses

Michael Hitrik, University of California, Los Angeles, *Spectra for non-self-adjoint operators and integrable dynamics*.

Andrew S. Raich, University of Arkansas, *Title to be announced*.

Daniel Rogalski, University of California, San Diego, *Title to be announced*.

Special Sessions

If you are volunteering to speak in a Special Session, you should send your abstract as early as possible via the abstract submission form found at www.ams.org/cgi-bin/abstracts/abstract.pl.

Analysis on the Navier-Stokes equations and related PDEs (Code: SS 9A), **Kazuo Yamazaki**, University of Rochester, and **Litzheng Tao**, University of California, Riverside.

Clustering of Graphs: Theory and Practice (Code: SS 18A), **Stephen J. Young** and **Jennifer Webster**, Pacific Northwest National Laboratory.

Combinatorial and Algebraic Structures in Knot Theory (Code: SS 5A), **Sam Nelson**, McKenna College, and **Allison Henrich**, Seattle University.

Combinatorial and Computational Commutative Algebra and Algebraic Geometry (Code: SS 21A), **Hirotschi Abo**, **Stefan Tohaneanu**, and **Alexander Woo**, University of Idaho.

Commutative Algebra (Code: SS 3A), **Jason Lutz** and **Katharine Shultis**, Gonzaga University.

Fixed Point Methods in Differential and Integral Equations (Code: SS 1A), **Theodore A. Burton**, Southern Illinois University in Carbondale.

Geometric Measure Theory and its Applications (Code: SS 20A), .

Geometry and Optimization in Computer Vision (Code: SS 15A), **Bala Krishnamoorthy**, Washington State University, and **Sudipta Sinha**, Microsoft Research, Redmond, WA.

Inverse Problems (Code: SS 2A), **Hanna Makaruk**, Los Alamos National Laboratory (LANL), and **Robert Owczarek**, University of New Mexico, Albuquerque and Los Alamos.

Mathematical & Computational Neuroscience (Code: SS 12A), **Alexander Dimitrov**, Washington State University Vancouver, **Andrew Oster**, Eastern Washington University, and **Predrag Tosic**, Washington State University.

Mathematical Modeling of Forest and Landscape Change (Code: SS 11A), **Demetrios Gatzolis**, US Forest Service, and **Nikolay Strigul**, Washington State University Vancouver.

Microlocal Analysis and Spectral Theory (Code: SS 17A), **Michael Hitrik**, University of California, Los Angeles, and **Semyon Dyatlov**, Massachusetts Institute of Technology.

Noncommutative algebraic geometry and related topics

MEETINGS & CONFERENCES

(Code: SS 16A), **Daniel Rogalski**, University of California, San Diego, and **James Zhang**, University of Washington.

Partial Differential Equations and Applications (Code: SS 8A), **V. S. Manoranjan**, **C. Moore**, **Lynn Schreyer**, and **Hong-Ming Yin**, Washington State University.

Recent Advances in Applied Algebraic Topology (Code: SS 14A), **Henry Adams**, Colorado State University, and **Bala Krishnamoorthy**, Washington State University.

Recent Advances in Optimization and Statistical Learning (Code: SS 19A), **Hongbo Dong**, **Bala Krishnamoorthy**, **Haijun Li**, and **Robert Mifflin**, Washington State University.

Recent Advances on Mathematical Biology and Their Applications (Code: SS 7A), **Robert Dillon** and **Xueying Wang**, Washington State University.

Several Complex Variables and PDEs (Code: SS 10A), **Andrew Raich** and **Phillip Harrington**, University of Arkansas.

Special Session on Analytic Number Theory and Automorphic Forms (Code: SS 6A), **Steven J. Miller**, Williams College, and **Sheng-Chi Liu**, Washington State University.

Theory and Applications of Linear Algebra (Code: SS 4A), **Judi McDonald** and **Michael Tsatsomeros**, Washington State University.

Undergraduate Research Experiences in the Classroom (Code: SS 13A), **Heather Moon**, Lewis-Clark State College.

Accommodations

Participants should make their own arrangements directly with the hotel of their choice. Special discounted rates were negotiated with the hotels listed below. Rates quoted do not include the Washington state hotel tax (9.8%). Participants must state that they are with the **American Mathematical Society (AMS) Meeting at Washington State University** to receive the discounted rate. The AMS is not responsible for rate changes or for the quality of the accommodations. **Hotels have varying cancellation and early checkout penalties; be sure to ask for details.**

Quality Inn Paradise Creek, S.E. 1400 Bishop Blvd., Pullman, WA 99163; 509-332-0500; <https://www.choicehotels.com/washington/pullman/quality-inn-hotels/wa015?source=gyxt>. Ask for the American Mathematical Society rates for a special discounted rate of **US\$109** per night for double queen beds **US\$119** for a king bed. This rate includes an indoor hot tub, mini fridge and microwave in each room, free Wi-Fi and complimentary hot breakfast. This property is located approximately 1.3 miles from campus. Cancellation and early check-out policies vary and penalties exist at this property; be sure to check when you make your reservation. The deadline for reservations at this rate is **April 19, 2017**.

The Hilltop Inn, 928 NW Olsen St, Pullman, WA 99163; 509-332-0928; www.hilltopinnpullman.com/. Rates are **US\$109.75** per night for one king bed or two queen beds. Amenities include microwave and fridge in each room, indoor pool and hot tub, free breakfast buffet and free

high-speed Internet. This property has a restaurant and lounge that opens every day at 4:00 pm. This property is located approximately 2 miles from campus. Cancellation and early check-out policies vary and penalties exist at this property; be sure to check when you make your reservation. The deadline for reservations at this rate is **April 10, 2017**.

Residence Inn by Marriott, 1255 NE North Fairway Dr, Pullman, WA 99163; 509-332-4400; www.marriott.com/hotels/travel/puwri-residence-inn-pullman/?scid=bb1a189a-fec3-4d19-a255-54ba596febe2. Rates are **US\$125.00** per night for one king bed rooms. Amenities include indoor pool and hot tub, free breakfast buffet and free high-speed Internet. This property is located less than 1 mile from the campus. Cancellation and early check-out policies vary and penalties exist at this property; be sure to check when you make your reservation. The deadline for reservations at a reduced rate is **March 21, 2017**.

Food Services

On Campus: On Campus dining is available at the Compton Union Building between 10:00 am and 5:00 pm. This building is adjacent to the Smith Center for Undergraduate Education where most of the talks will be held.

Located on the first floor of the Compton Union Building are *the Bookie Cafe*, open Saturday 10:00 am–5:00 pm; *Subway*, open Saturday and Sunday until 7:00 pm; and *Panda Express*, open Saturday and Sunday until 7:00 pm.

Off Campus: Downtown Pullman is about a 15 minute walk from the campus. There are many restaurants in that area. More information on restaurants and local attractions in the Pullman area, including a map, can be found at pullmanchamber.com/wp-content/uploads/2015/04/PullmanMap08.pdf.

Some options for coffee include:

Cafe Moro, 100A E Main St, Pullman; 509-338-3892; <https://www.facebook.com/pullmancafemoro/>; a mellow coffeehouse featuring coffee drinks, frappes, baked goods, beer and occasional live music.

Daily Grind, 230 E Main St, Pullman; 509-334-3380; web.archive.org/web/20160309051325/thedailygrindspessos.com/; serving fresh coffee and baked goods.

Some downtown options for dining include:

Cooky's European Deli, 215 Main Street, Pullman; 509-332-224; www.manta.com/c/mttvwrq/cooky-s-european-deli-market-11c; a local market and delicatessen.

Mandarin House, 115 N Grand Ave, Pullman; (509) 332-1888; www.pullmanchinesefood.com/; unpretentious Chinese restaurant serving standard fare such as crab rangoon and beef with broccoli.

My Office Bar & Grill, 215 S Grand Ave, Pullman; (509) 334-120; <https://www.facebook.com/My-Office-Bar-Grill-115549738468097/>; a basic pub with draft and bottled beers in a casual atmosphere offering darts and pool.

Old Post Office Wine Bar/Restaurant, 1245 SE Paradise St, Pullman; (509) 338-9463; www.paradisecreekbrewery.com/; beers brewed in the basement of an old post office, with a spacious bar upstairs serving pub fare.

Registration and Meeting Information

Advance Registration: Advance registration for this meeting opens on **January 19, 2017**. Advance registration fees will be US\$59 for AMS members, US\$85 for nonmembers, and US\$10 for students, unemployed mathematicians, and emeritus members. Participants may cancel registrations made in advance by e-mailing mmsb@ams.org. The deadline to cancel is the first day of the meeting.

On-site Information and Registration: The registration desk, AMS book exhibit, and coffee service will be located in the atrium of the Smith Center for Undergraduate Education. The Invited Addresses will be held in the Smith Center for Undergraduate Education, Room 203. Special Sessions and Contributed Paper Sessions will also take place in the Smith Center for Undergraduate Education. Please look for additional information about specific session room locations on the Web and in the printed program. For further information on building locations, a campus map is available at map.wsu.edu/.

The registration desk will be open on Saturday, April 22, 7:30 am–4:00 pm and Sunday, April 23, 8:00 am–12:00 pm. The same fees apply for on-site registration, as for advance registration. Fees are payable on-site via cash, check, or credit card.

Other Activities

Book Sales: Stop by the on-site AMS bookstore to review the newest publications and take advantage of exhibit discounts and free shipping on all on-site orders! AMS members receive 40 percent off list price. Nonmembers receive a 25 percent discount. Not a member? Ask a representative about the benefits of AMS membership. **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 wish to discuss with the AMS, please stop by the book exhibit.

Special Needs

It is the goal of the AMS to ensure that its conferences are accessible to all, regardless of disability. The AMS will strive, unless it is not practicable, to choose venues that are fully accessible to the physically handicapped.

If special needs accommodations are necessary in order for you to participate in an AMS Sectional Meeting, please communicate your needs in advance to the AMS Meetings Department by:

- Registering early for the meeting
- Checking the appropriate box on the registration form, and
- Sending an e-mail request to the AMS Meetings Department at mmsb@ams.org or meet@ams.org.

AMS Policy on a Welcoming Environment

The AMS strives to ensure that participants in its activities enjoy a welcoming environment. In all its activities, the AMS seeks to foster an atmosphere that encourages the free expression and exchange of ideas. The AMS supports equality of opportunity and treatment for all participants, regardless of gender, gender identity, or expression, race, color, national or ethnic origin, religion or religious belief, age, marital status, sexual orientation, disabilities, or veteran status.

Local Information and Maps

This meeting will take place on the campus of Washington State University. A campus map can be found at map.wsu.edu/. Information about the WSU Mathematics Department can be found at www.math.wsu.edu/. Please visit the Washington State University website at <https://wsu.edu/> for additional information on the campus.

Please visit the local organizers' website for this meeting at <https://www.math.wsu.edu/AMS>. Please watch the AMS website at www.ams.org/meetings/sectional/sectional.html for additional information on this meeting.

Parking

Parking is available under the Center for Undergraduate Education at a cost of US\$3 per day on Saturday and Sunday. This is the most convenient parking as it is closest to the meeting spaces.

Day visitors are also directed to park on North Campus Drive (off of Bath Road), South Campus Drive (off of College Street), Coffin Street Parking Lot, Dayton Lot (off of Sills Drive) and Russwurm House Parking Lot (just east of Tower Drive).

Travel

This meeting will take place on the main campus of Washington State University, located in Pullman, Washington.

By Air: *The Pullman/Moscow Airport* is two miles from the Pullman campus. *Horizon Air* (Alaska Airlines) services the region. Please visit their website for a list of cities with direct flights; www.flypuw.com/. Rental cars are available at the airport; for more information about rental cars and other ground transportation please visit www.flypuw.com/transportation/.

Spokane International Airport is 78 miles from campus and serviced by most airlines; for information on airlines and flight schedules please visit spokaneairports.net/. There are many options available for ground transportation from Spokane International Airport. *The Wheatland Express Shuttle* offers service to Pullman from Spokane International Airport for US\$38.00; www.wheatlandexpress.com/airportexpres/. Rental cars are

MEETINGS & CONFERENCES

available at the airport; for more information please visit spokaneairports.net/rental-cars/.

By Train: Rail service to Pullman is currently available from major cities through *Amtrak*; <https://www.amtrak.com/home>. The Pullman train station is located on 1205 North Grand Avenue, approximately a 20 minute walk from campus.

By Bus: Major bus routes pass through Pullman. *Northwestern Trailways* stops about one mile from campus and offers round-trip fare to Spokane International Airport for US\$68. For more information please call 800-366-3830 or visit www.northwesterntrailways.com/Home/tabid/36/Default.aspx.

Greyhound Transit offers daily trips to Pullman. Buses stop at the Dissmores IGA located at 1205 N Grand St, about a 20 minute walk from campus. For more information on Greyhound please call (509) 332-2918 or visit <https://www.greyhound.com/>.

By Car:

From the south: Take US-195 North to WA-27 N/S Grand Ave. Turn right onto WA-270 E/SE Paradise St (signs for Moscow/WSU). Turn left onto E Spring St. Your destination will be on the right.

From the north: Take US-195 South and turn left onto WA-270 East. In two miles turn right onto N Grand Ave. Turn left onto WA-270 E/SE Paradise St (signs for Moscow/WSU). Turn left onto E Spring St. Your destination will be on the right.

From the east: Take WA-270 West toward Airport Rd/Terre View Dr. Turn right onto E Spring St. Your destination will be on the right.

From the west: Follow I-90 East and take exit 137 to merge onto WA-26 E toward Othello/Pullman. Follow WA-26 E to US-195 S in Colfax. From US-195 South turn left onto WA-270 East. In two miles turn right onto N Grand Ave. Turn left onto WA-270 E/SE Paradise St (signs for Moscow/WSU). Turn left onto E Spring St. Your destination will be on the right.

For a map of campus with surrounding routes, go to <https://visitor.wsu.edu/VisitorMap.html>.

Car Rental: Hertz is the official car rental company for the meeting. To make a reservation accessing our special meeting rates online at www.hertz.com, click on the box "I have a discount", and type in our convention number (CV): CV#04N30007. You can also call Hertz directly at 800-654-2240 (U.S. and Canada) or 1-405-749-4434 (other countries). At the time of reservation, the meeting rates will be automatically compared to other Hertz rates and you will be quoted the best comparable rate available.

For directions to campus, inquire at your rental car counter.

Local Transportation

Walking, biking and personal cars are recommended to get around campus and Pullman.

Local bus transportation is available through *Pullman Transit*. The general public may ride Pullman Transit by paying per ride or by purchasing a Monthly, Semi-Annual or Annual pass at the WSU Visitors Center.

Weather:

The average high temperature for April is 58 degrees and the average low is 38 degrees. Historically, the probability of some precipitation in given day is 40 percent. Weather conditions can change fairly rapidly and visitors should be prepared for inclement weather and check weather forecasts in advance of their arrival.

Social Networking:

Attendees and speakers are encouraged to tweet about the meeting using the hashtags #AMSmtg.

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 travel.state.gov/content/travel/en.html. If you need a preliminary conference invitation in order to secure a visa, please send your request to cro@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 US 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 websites above for the most up-to-date information.

New York, New York

Hunter College, City University of New York

May 6–7, 2017

Saturday – Sunday

Meeting #1129

Eastern Section

Associate secretary: Steven H. Weintraub

Announcement issue of *Notices*: March 2017

Program first available on AMS website: March 22, 2017

Issue of *Abstracts*: Volume 38, Issue 2

Deadlines

For organizers: Expired

For abstracts: March 14, 2017

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

Invited Addresses

Jeremy Kahn, City University of New York, *Title to be announced.*

Fernando Coda Marques, Princeton University, *Title to be announced.*

James Maynard, Magdalen College, University of Oxford, *Title to be announced* (Erdős Memorial Lecture).

Kavita Ramanan, Brown University, *Title to be announced.*

Special Sessions

If you are volunteering to speak in a Special Session, you should send your abstract as early as possible via the abstract submission form found at www.ams.org/cgi-bin/abstracts/abstract.pl.

Analysis and numerics on liquid crystals and soft matter (Code: SS 16A), **Xiang Xu**, Old Dominion University, and **Wujun Zhang**, Rutgers University.

Applications of network analysis, in honor of Charlie Suffel's 75th birthday (Code: SS 18A), **Michael Yatauro**, Pennsylvania State University-Brandywine.

Banach Space Theory and Metric Embeddings (Code: SS 10A), **Mikhail Ostrovskii**, St John's University, and **Beata Randrianantoanina**, Miami University of Ohio.

Cluster Algebras in Representation Theory and Combinatorics (Code: SS 6A), **Alexander Garver**, Université du Québec à Montréal and Sherbrooke, and **Khrystyna Serhiyenko**, University of California at Berkeley.

Cohomologies and Combinatorics (Code: SS 15A), **Rebecca Patrias**, Université du Québec à Montréal, and **Oliver Pechenik**, Rutgers University.

Common Threads to Nonlinear Elliptic Equations and Systems (Code: SS 14A), **Florin Catrina**, St. John's University, and **Wenxiong Chen**, Yeshiva University.

Commutative Algebra (Code: SS 1A), **Laura Ghezzi**, New York City College of Technology-CUNY, and **Jooyoun Hong**, Southern Connecticut State University.

Computability Theory: Pushing the Boundaries (Code: SS 9A), **Johanna Franklin**, Hofstra University, and **Russell Miller**, Queens College and Graduate Center, City University of New York.

Computational and Algorithmic Group Theory (Code: SS 7A), **Denis Serbin** and **Alexander Ushakov**, Stevens Institute of Technology.

Cryptography (Code: SS 3A), **Xiaowen Zhang**, College of Staten Island and Graduate Center-CUNY.

Current Trends in Function Spaces and Nonlinear Analysis (Code: SS 2A), **David Cruz-Uribe**, University of Alabama, **Jan Lang**, The Ohio State University, and **Oswaldo Mendez**, University of Texas at El Paso.

Differential and Difference Algebra: Recent Developments, Applications, and Interactions (Code: SS 12A), **Omár León-Sánchez**, McMaster University, and **Alexander Levin**, The Catholic University of America.

Geometric Function Theory and Related Topics (Code: SS 19A), **Sudeb Mitra**, Queens College and Graduate Center-CUNY, and **Zhe Wang**, Bronx Community College-CUNY.

Geometry and Topology of Ball Quotients and Related Topics (Code: SS 5A), **Luca F. Di Cerbo**, Max Planck Institute, Bonn, and **Matthew Stover**, Temple University.

Hydrodynamic and Wave Turbulence (Code: SS 11A), **Tristan Buckmaster**, Courant Institute of Mathematical Sciences, New York University, and **Vlad Vicol**, Princeton University.

Infinite Permutation Groups, Totally Disconnected Locally Compact Groups, and Geometric Group Theory (Code: SS 4A), **Delaram Kahrobaei**, New York City College of Technology and Graduate Center-CUNY, and **Simon Smith**, New York City College of Technology-CUNY.

Nonlinear and Stochastic Partial Differential Equations: Theory and Applications in Turbulence and Geophysical Flows (Code: SS 8A), **Nathan Glatt-Holtz**, Tulane University, **Geordie Richards**, Utah State University, and **Xiaoming Wang**, Florida State University.

Operator algebras and ergodic theory (Code: SS 17A), **Genady Grabarnik** and **Alexander Katz**, St John's University.

Qualitative and Quantitative Properties of Solutions to Partial Differential Equations (Code: SS 20A), **Blair Davey**, The City College of New York-CUNY, and **Nguyen Cong Phuc** and **Jiuyi Zhu**, Louisiana State University.

Recent Developments in Automorphic Forms and Representation Theory (Code: SS 21A), **Moshe Adrian**, Queens College-CUNY, and **Shuichiro Takeda**, University of Missouri.

Representation Spaces and Toric Topology (Code: SS 13A), **Anthony Bahri**, Rider University, and **Daniel Ramras** and **Mentor Stafa**, Indiana University-Purdue University Indianapolis.

Montréal, Quebec Canada

McGill University

July 24–28, 2017

Monday – Friday

Meeting #1130

The second Mathematical Congress of the Americas (MCA 2017) is being hosted by the Canadian Mathematical Society (CMS) in collaboration with the Pacific Institute for the Mathematical Sciences (PIMS), the Fields Institute (FIELDS), Le Centre de Recherches Mathématiques (CRM), and the Atlantic Association for Research in the Mathematical Sciences (AARMS).

Associate secretary: Brian D. Boe

Announcement issue of *Notices*: To be announced

Program first available on AMS website: January 23, 2017

Issue of *Abstracts*: To be announced

Deadlines

For organizers: Expired

For abstracts: March 31, 2017

Denton, Texas

University of North Texas

September 9–10, 2017

Saturday – Sunday

Meeting #1131

Central Section

Associate secretary: Georgia Benkart

Announcement issue of *Notices*: June 2017

Program first available on AMS website: July 27, 2017

Issue of *Abstracts*: Volume 38, Issue 3

Deadlines

For organizers: February 2, 2017

For abstracts: July 18, 2017

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

Invited Addresses

Mirela Çiperiani, University of Texas at Austin, *Title to be announced*.

Adrianna Gillman, Rice University, *Title to be announced*.

Kevin Pilgrim, Indiana University, *Title to be announced*.

Special Sessions

If you are volunteering to speak in a Special Session, you should send your abstract as early as possible via the abstract submission form found at www.ams.org/cgi-bin/abstracts/abstract.pl.

Banach Spaces and Applications (Code: SS 9A), **Pavlos Motakis**, Texas A&M University, and **Bönyamin Sari**, University of North Texas.

Commutative Algebra (Code: SS 10A), **Jonathan Montano**, University of Kansas, and **Alessio Sammartano**, Purdue University.

Differential Equation Modeling and Analysis for Complex Bio-systems (Code: SS 8A), **Pengcheng Xiao**, University of Evansville, and **Honghui Zhang**, Northwestern Polytechnical University.

Dynamics, Geometry and Number Theory (Code: SS 1A), **Lior Fishman** and **Mariusz Urbanski**, University of North Texas.

Fractal Geometry and Ergodic Theory (Code: SS 5A), **Mrinal Kanti Roychowdhury**, University of Texas Rio Grande Valley.

Invariants of Links and 3-Manifolds (Code: SS 7A), **Mieczysław K. Dabkowski** and **Anh T. Tran**, The University of Texas at Dallas.

Lie algebras, Superalgebras, and Applications (Code: SS 3A), **Charles H. Conley**, University of North Texas, **Dimitar Grantcharov**, University of Texas at Arlington, and **Natalia Rozhkovskaya**, Kansas State University.

Noncommutative and Homological Algebra (Code: SS 4A), **Anne Shepler**, University of North Texas, and **Sarah Witherspoon**, Texas A&M University.

Numbers, Functions, Transcendence, and Geometry (Code: SS 6A), **William Cherry**, University of North Texas, **Mirela Çiperiani**, University of Texas Austin, **Matt Papanikolas**, Texas A&M University, and **Min Ru**, University of Houston.

Real-Analytic Automorphic Forms (Code: SS 2A), **Olav K Richter**, University of North Texas, and **Martin Westerholt-Raum**, Chalmers University of Technology.

Buffalo, New York

State University of New York at Buffalo

September 16–17, 2017

Saturday – Sunday

Meeting #1132

Eastern Section

Associate secretary: Steven H. Weintraub

Announcement issue of *Notices*: June 2017

Program first available on AMS website: August 3, 2017

Issue of *Abstracts*: Volume 38, Issue 3

Deadlines

For organizers: February 16, 2017

For abstracts: July 25, 2017

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

Invited Addresses

Inwon Kim, University of California at Los Angeles, Title to be announced.

Govind Menon, Brown University, Title to be announced.

Bruce Sagan, Michigan State University, Title to be announced.

Special Sessions

If you are volunteering to speak in a Special Session, you should send your abstract as early as possible via the abstract submission form found at www.ams.org/cgi-bin/abstracts/abstract.pl.

High Order Numerical Methods for Hyperbolic PDEs and Applications (Code: SS 2A), **Jae-Hun Jung**, University at Buffalo-SUNY, **Fengyang Li**, Rensselaer Polytechnic Institute, and **Li Wang**, University at Buffalo-SUNY.

Nonlinear Wave Equations, Inverse Scattering and Applications. (Code: SS 1A), **Gino Biondini**, University at Buffalo-SUNY.

p-adic Aspects of Arithmetic Geometry (Code: SS 3A), **Ling Xiao**, University of Connecticut, and **Hui June Zhu**, University at Buffalo-SUNY.

Orlando, Florida

University of Central Florida, Orlando

September 23–24, 2017

Saturday – Sunday

Meeting #1133

Southeastern Section

Associate secretary: Brian D. Boe

Announcement issue of *Notices*: June 2017

Program first available on AMS website: August 10, 2017

Issue of *Abstracts*: Volume 38, Issue 4

Deadlines

For organizers: February 23, 2017

For abstracts: August 1, 2017

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

Invited Addresses

Christine Heitsch, Georgia Institute of Technology, Title to be announced.

Jonathan Kujawa, University of Oklahoma, Title to be announced.

Christopher D Sogge, Johns Hopkins University, Title to be announced.

Special Sessions

If you are volunteering to speak in a Special Session, you should send your abstract as early as possible via the abstract submission form found at www.ams.org/cgi-bin/abstracts/abstract.pl.

Algebraic Curves and their Applications (Code: SS 3A), **Lubjana Beshaj**, The University of Texas at Austin.

Applied Harmonic Analysis: Frames, Samplings and Applications (Code: SS 6A), **Dorin Dutkay**, **Deguang Han**, and **Qiyu Sun**, University of Central Florida.

Commutative Algebra: Interactions with Algebraic Geometry and Algebraic Topology (Code: SS 1A), **Joseph Brennan**, University of Central Florida, and **Alina Iacob** and **Saeed Nasseh**, Georgia Southern University.

Fractal Geometry, Dynamical Systems, and Their Applications (Code: SS 4A), **Mrinal Kanti Roychowdhury**, University of Texas Rio Grande Valley.

Graph Connectivity and Edge Coloring (Code: SS 5A), **Colton Magnant**, Georgia Southern University.

Structural Graph Theory (Code: SS 2A), **Zixia Song**, University of Central Florida.

Riverside, California

University of California, Riverside

November 4–5, 2017

Saturday – Sunday

Meeting #1134

Western Section

Associate secretary: Michel L. Lapidus

Announcement issue of *Notices*: September 2017

Program first available on AMS website: September 21, 2017

Issue of *Abstracts*: Volume 38, Issue 4

Deadlines

For organizers: April 14, 2017

For abstracts: September 12, 2017

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

Invited Addresses

Paul Balmer, University of California, Los Angeles, Title to be announced.

Pavel Etingof, Massachusetts Institute of Technology, Title to be announced.

Monica Vazirani, University of California, Davis, Title to be announced.

Special Sessions

If you are volunteering to speak in a Special Session, you should send your abstract as early as possible via the abstract submission form found at www.ams.org/cgi-bin/abstracts/abstract.pl.

Combinatorial aspects of the polynomial ring (Code: SS 1A), **Sami Assaf** and **Dominic Searles**, University of Southern California.

Ring Theory and Related Topics (Celebrating the 75th Birthday of Lance W. Small) (Code: SS 2A), **Jason Bell**, University of Waterloo, **Ellen Kirkman**, Wake Forest University, and **Susan Montgomery**, University of Southern California.

San Diego, California

San Diego Convention Center and San Diego Marriott Hotel and Marina

January 10–13, 2018

Wednesday – Saturday

Meeting #1135

Joint Mathematics Meetings, including the 124th Annual Meeting of the AMS, 101st 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 of Symbolic Logic (ASL), with sessions contributed by the Society for Industrial and Applied Mathematics (SIAM).

Associate secretary: Georgia Benkart

Announcement issue of *Notices*: October 2017

Program first available on AMS website: To be announced

Issue of *Abstracts*: Volume 39, Issue 1

Deadlines

For organizers: April 1, 2017

For abstracts: To be announced

Columbus, Ohio

Ohio State University

March 17–18, 2018

Saturday – Sunday

Meeting #1136

Central Section

Associate secretary: Georgia Benkart

Announcement issue of *Notices*: To be announced

Program first available on AMS website: To be announced

Issue of *Abstracts*: To be announced

Deadlines

For organizers: To be announced

For abstracts: To be announced

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

Special Sessions

If you are volunteering to speak in a Special Session, you should send your abstract as early as possible via the abstract submission form found at www.ams.org/cgi-bin/abstracts/abstract.pl.

Probability in Convexity and Convexity in Probability (Code: SS 2A), **Elizabeth Meckes**, **Mark Meckes**, and **Elisabeth Werner**, Case Western Reserve University.

Recent Advances in Approximation Theory and Operator Theory (Code: SS 1A), **Jan Lang** and **Paul Nevai**, The Ohio State University.

Nashville, Tennessee

Vanderbilt University

April 14–15, 2018

Saturday – Sunday

Meeting #1138

Southeastern Section

Associate secretary: Brian D. Boe

Announcement issue of *Notices*: To be announced

Program first available on AMS website: To be announced

Issue of *Abstracts*: To be announced

Deadlines

For organizers: To be announced

For abstracts: To be announced

Portland, Oregon

Portland State University

April 14–15, 2018

Saturday – Sunday

Meeting #1137

Western Section

Associate secretary: Michel L. Lapidus

Announcement issue of *Notices*: To be announced

Program first available on AMS website: To be announced

Issue of *Abstracts*: To be announced

Deadlines

For organizers: To be announced

For abstracts: To be announced

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

Special Sessions

If you are volunteering to speak in a Special Session, you should send your abstract as early as possible via the abstract submission form found at www.ams.org/cgi-bin/abstracts/abstract.pl.

Inverse Problems (Code: SS 2A), **Hanna Makaruk**, Los Alamos National Laboratory (LANL), and **Robert Owczarek**, University of New Mexico, Albuquerque and Los Alamos.

Pattern Formation in Crowds, Flocks, and Traffic (Code: SS 1A), **J. J. P. Veerman**, Portland State University, **Alethea Barbaro**, Case Western Reserve University, and **Bassam Bamieh**, UC Santa Barbara.

Boston, Massachusetts

Northeastern University

April 21–22, 2018

Saturday – Sunday

Meeting #1139

Eastern Section

Associate secretary: Steven H. Weintraub

Announcement issue of *Notices*: To be announced

Program first available on AMS website: To be announced

Issue of *Abstracts*: To be announced

Deadlines

For organizers: September 21, 2017

For abstracts: March 6, 2018

Shanghai, People's Republic of China

Fudan University

June 11–14, 2018

Monday – Thursday

Meeting #1140

Associate secretary: Steven H. Weintraub

Announcement issue of *Notices*: To be announced

Program first available on AMS website: To be announced

Issue of *Abstracts*: To be announced

Deadlines

For organizers: To be announced

For abstracts: To be announced

Newark, Delaware

University of Delaware

September 29–30, 2018

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

Issue of *Abstracts*: To be announced

Deadlines

For organizers: February 28, 2018

For abstracts: To be announced

Fayetteville, Arkansas

University of Arkansas

October 6–7, 2018

Saturday – Sunday

Southeastern Section

Associate secretary: Brian D. Boe

Announcement issue of *Notices*: To be announced

Program first available on AMS website: To be announced

Issue of *Abstracts*: To be announced

Deadlines

For organizers: To be announced

For abstracts: To be announced

Ann Arbor, Michigan

University of Michigan, Ann Arbor

October 20–21, 2018

Saturday – Sunday

Central Section

Associate secretary: Georgia Benkart

Announcement issue of *Notices*: To be announced

Program first available on AMS website: To be announced

Issue of *Abstracts*: To be announced

Deadlines

For organizers: March 20, 2018

For abstracts: August 21, 2018

San Francisco, California

San Francisco State University

October 27–28, 2018

Saturday – Sunday

Western Section

Associate secretary: Michel L. Lapidus

Announcement issue of *Notices*: August 2018

Program first available on AMS website: To be announced

Issue of *Abstracts*: To be announced

Deadlines

For organizers: April 30, 2018

For abstracts: August 28, 2018

Baltimore, Maryland

*Baltimore Convention Center, Hilton
Baltimore, and Baltimore Marriott
Inner Harbor Hotel*

January 16–19, 2019

Wednesday – Saturday

Joint Mathematics Meetings, including the 125th Annual Meeting of the AMS, 102nd 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 of 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 2018

Program first available on AMS website: To be announced

Issue of *Abstracts*: To be announced

Deadlines

For organizers: April 2, 2018

For abstracts: To be announced

Honolulu, Hawaii

University of Hawaii at Manoa

March 29–31, 2019

Friday – Sunday

Central Section

Associate secretaries: Georgia Benkart and Michel L. Lapidus

Announcement issue of *Notices*: To be announced

Program first available on AMS website: To be announced

Issue of *Abstracts*: To be announced

Deadlines

For organizers: To be announced

For abstracts: To be announced

Denver, Colorado

Colorado Convention Center

January 15–18, 2020

Wednesday – Saturday

Joint Mathematics Meetings, including the 126th Annual Meeting of the AMS, 103rd 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 of Symbolic Logic (ASL), with sessions contributed by the Society for Industrial and Applied Mathematics (SIAM)

Associate secretary: Michel L. Lapidus

Announcement issue of *Notices*: To be announced

Program first available on AMS website: November 1, 2019

Issue of *Abstracts*: To be announced

Deadlines

For organizers: April 1, 2019

For abstracts: To be announced

Washington, District of Columbia

Walter E. Washington Convention Center

January 6–9, 2021

Wednesday – Saturday

Joint Mathematics Meetings, including the 127th Annual Meeting of the AMS, 104th 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 of Symbolic Logic (ASL), with sessions contributed by the Society for Industrial and Applied Mathematics (SIAM).

Associate secretary: Brian D. Boe

Announcement issue of *Notices*: October 2020

Program first available on AMS website: November 1, 2020

Issue of *Abstracts*: To be announced

Deadlines

For organizers: April 1, 2020

For abstracts: To be announced