



## Midwest/McGehee Dynamical Systems Conference

#### University of Minnesota November 1-4, 2018 Minneapolis, MN

The Midwest Dynamical Systems Conference is being preceded by a satellite conference in honor of Dick McGehee's career contributions to dynamical systems.

Link to Program;

Link to Conference Pictures;

Link to Doug Norton Saturday Banquet Poem: "RPM"

IMA Recordings of the 15 Satellite Conference talks and all Midwest/McGehee Talk
<u>Abstracts</u>

Travel Reimbursement Forms

# **Midwest Speakers**

Aaron Brown, University of Chicago

Chris Jones, University of North Carolina Richard McGehee, University of Minnesota Twin Cities <u>Katherine Meyer</u>, University of Minnesota Twin Cities Konstantin Mischaikow, Rutgers University <u>Alice Nadeau</u>, University of Minnesota Twin Cities Anca Radulescu, SUNY New Paltz James Yorke, University of Maryland Mary Lou Zeeman, Bowdoin College

### McGehee Satellite Conference Speakers

Anna Barry, University of Auckland Richard Buckalew, University of Minnesota Duluth Mohamed Elbialy, University of Toledo Marshall Hampton, University of Minnesota Duluth Kaitlin Hill, University of Minnesota Twin Cities Yannis Kevrekidis, Johns Hopkins University Cordelia McGehee, Mayo Clinic Rochester MN Richard Moeckel, University of Minnesota Twin Cities <u>Hinke Osinga</u>, University of Auckland Bruce Peckham, University of Minnesota Duluth Gareth Roberts, Holy Cross Evelyn Sander, George Mason University Mary Silber, University of Chicago Cameron Thieme, University of Minnesota Twin Cities Esther Widiasih, University of Hawaii West O'ahu

#### Saturday Poster Session

Montie Avery, University of Minnesota Twin Cities

James Broda, Bowdoin College

Harini Chandramouli, University of Minnesota Twin Cities

Ivan Chio, Indiana University-Purdue University Indianapolis

Ty Frazier, University of Minnesota Twin Cities

Hye Kyung Kim, University of Minnesota Twin Cities

Alice Nadeau, University of Minnesota Twin Cities

Shannon Negaard-Paper, University of Minnesota Twin Cities

Duong Nguyen, University of Houston

Sarah Pierro, University of Minnesota Duluth

Felipe Perez Pereira, University of Bristol

Maria Sanchez and Sayandeep Biswas, University of Minnesota Twin Cities

Julie Sherman, University of Minnesota Twin Cities

Cameron Thieme, University of Minnesota Twin Cities Growing Stripes, With and Without Wrinkles

Stationary distributions and convergence rates for piecewise deterministic Markov processes

The Hyperbolic Restricted 3-Body Problem and Applications to Celestial Mechanics and Climate Mathematics

Lee-Yang zeros for the Cayley Tree and expanding maps of the circle

Do near triple collisions explain the prevalence of binary stars in globular clusters?

A Hopf Bifurcation in a Dynamical Model for Red Coral Populations

A new method of carbon isotope data analysis shows net inorganic carbon since 1980

Dispersions: Tools for Systemizing Non-Smooth Dynamical Systems

Quasistatic dynamical system in higher dimension

Modeling Waves in Early Embryonic Drosophila Cells

Dimension of measures with infinite entropy

Non-smooth bifurcation analysis on a perturbation of Welander's Model

Constraints on the Oceanic Carbon Sink Using Atmospheric Oxygen Data

Filippov Systems and Dispersions

Jasper Weinburd, University	Advection and Autocatalysis in
of Minnesota Twin Cities	Banded Vegetation Patterns
Kitty Yang, Northwestern	The mapping class group of a

University

The mapping class group of a minimal subshift

If you would like to present a poster, email Bruce Peckham at <u>midwestdynamics2018@gmail.com</u> with your name, affiliation and poster title.

# Congratulations to Dick

Please take a moment to send a congratulatory message for Dick. You are also welcome to send photos. Dick's students will compile a multimedia album of cards, emails, and photos, to be presented to him at the conference. You can:

- 1. mail a card to Alice Nadeau, 127 Vincent Hall, 206 Church Street SE, Minneapolis MN 55455
- 2. email a message to congrats2mcgehee@gmail.com
- 3. record a video message using <u>this link</u>. (password: dynamicalsystems)

Contact Kate Meyer with questions regarding the album at meye2098@umn.edu.

# Other Information

<u>Program</u>

IMA Recordings of the 15 Satellite Conference talks and all Midwest/McGehee Talk Abstracts

Participant List (as of Oct. 30, 2018 - updated weekly)

Conference Banquet, honoring Dick McGehee, will be held Saturday night at Coffman Memorial Union, across Washington Stree from Vincent Hall. We are asking attendees to contribute \$20 toward the total cost. The Math Department will cover the balance. Contributions will be collected at the conference. Past conferences and information about the e-mailing list

**Registration.** To register, please send an email to midwestdynamics2018@gmail.com with subject heading REGISTRATION, containing your name, your university or employer, your advisor's name if you are a student, and your arrival and departure days. There is some funding for junior participants and those without grants; please indicate in your email if you would like to request funding for travel and/or lodging. Include the amount requested, and remember that you must use a US air carrier if you request airfare reimbursement. Graduate students requesting hotel support are asked to share rooms. Requests for support received by September 1st will receive responses by September 10th. Requests received after that date will be handled on a rolling basis, subject to remaining availability of funds. If you are looking for a roommate, send an email to

<u>midwestdynamics2018@gmail.com</u> with subject heading ROOMMATE. I will share a google file with only names and email addresses for only those seeking a roommate. It will be up to you to contact potential roommates.

**Hotels.** Reserve by Oct. 1, 2018 to obtain these discounted rates.

- Days Hotel on University <u>2407 University Ave SE</u> <u>Minneapolis, MN 55414</u>
  -rate is \$92/night + 13.14% tax
  -call the reservations line at (612) 623-3999 and mention the name of the conference to get the rate.
  Graduate Hotel Minneapolis 615 Washington Ave SE
- Graduate Hotel Minneapolis <u>615 Washington Ave SE</u> <u>Minneapolis, MN 55414</u>
  -rate is \$138/night + 13.14% tax
  -Call 612-379-8888, Press 1 for Reservations and ask for the Midwest/McGehee Dynamical Systems Conference, OR <u>Click here.</u>

#### Transportation. Link to IMA web transportation page.

Sublinks to parking map and campus map. Closest parking lots are the Washington Ave. Ramp, and the Weismann Museum Ramp. Both have a daily max charge of \$12.

**Speakers:** By September 1, 2018, please send title, abstract and (optional) web homepage address to <u>midwestdynamics2018@gmail.com</u> with subject heading SPEAKER.

**Organizers:** Bruce Peckham, Rick Moeckel, Evelyn Sander, Jim Walsh and students of Dick McGehee

**Sponsors:** This event is funded by the <u>National Science</u> <u>Foundation</u>, the University of Minnesota <u>College of Science</u> <u>and Engineering</u>, the University of Minnesota <u>School of</u> <u>Mathematics</u>, and the University of Minnesota <u>Institute for</u> <u>Mathematics and its Applications.</u>