

JOINT MATH MEETINGS 2015

MATH CIRCLE ACTIVITIES

SAT JAN 10-TUES JAN 13



SATURDAY JANUARY 10

From the MAA Contributed Paper Session on Outreach CC 216A

10:15-10:25 AM Polina Sabinin Bridgewater State

Games Teachers Play. Games for Bringing Deep Mathematical Thinking into pre K-12.

10:45-10:55 AM Phil Yasskin Texas A & M University

Texas A & M Summer Educational Enrichment in Math (SEE-Math): Doing not Lecturing.

11:00-11:10 AM Frank Sottlie Texas A&M University

Texas A & M Math Circle

**2:15-4:15 PM Minicourse: How to Run a Successful Math Circle A
Continues Monday, January 12 1:00-3:00 PM for Part B**

Both Meetings in Convention Center Room 207A

Minicourse Presenters

Amanda Katharine Serenevy, Riverbend Community Math Center
Philip B. Yasskin, Texas A&M University; and
Brandy Wieggers, Central Washington University; MSRI; NAMC

2:00 – 3:30 pm Informal Circle:

Bob Klein Ohio State University and Chair Elect of the SIGMAA on Circles

Liar's Bingo CC 214C

7:00 – 8:30 pm Informal Circle:

Brandy Wieggers Central Washington University

Mathematical Biology CC 212B

"There is nothing strange in the circle being
the origin of any and every marvel."-Aristotle



SUNDAY JANUARY 11

8:30-8:40 AM from the AMS Session on Math Education 207B

On The creation of a Math Teachers' Circle and Why You Should Get Involved Too

George McNulty and Douglas Meade University of South Carolina

Nieves McNulty Columbia College

**10:00 – 11:30 AM Special Interest Group of the MAA (SIGMAA)
Math Circles for Students and Teachers (MCST)**

MATH CIRCLE DEMONSTRATION

Remodeling the Floor CC 214C

Dave Auckly Kansas State University

Japeth Wood Bard College & New York Math Circle

Phil Yasskin Texas A & M University

1:00 – 2:30 PM MCST MATH WRANGLES CC214C & CC216B (1 per room)

Steve Dunbar MAA & Ed Keppelmann U. of Nevada Reno

Students Provided by Phil Yasskin Texas A&M

10:00-11:55 AM from the Poster session on Outreach Exhibit Hall C

Navajo Nation Math Circles Dave Auckly University of Kansas

Henry Fowler Diné College

Bob Klein Ohio State University

Tatiana Shubin San Jose State University

2:00-4:00 PM from the Poster session on Projects Supported by the NSF

Division of Undergraduate Education Exhibit Hall C

*Investigating the Impact of Math Teachers' Circles on Mathematical knowledge for Teaching
Classroom Practice.* Diana White UC Denver;

Brianna Donaldson and Brian Conrey AIM;

Kristin Umland and Michael Nakayame U of New Mexico

[When asked why are numbers beautiful?]

*"It's like asking why is Ludwig van Beethoven's Ninth Symphony beautiful. If you don't see why,
someone can't tell you. I know numbers are beautiful. If they aren't beautiful, nothing is."*

Paul Erdős



MONDAY, JANUARY 12

8:30-9:00 AM from the AMS Special session on Creating Coherence in K-12 Mathematics **CC 007A**

Developing the Horizon Content Knowledge of Teachers through a Math Teachers' Circle.

Thomas Clark, Dordt College

1:00-3:00 PM How to run a Successful Math Circle Part B **CC207A**

2:00-3:20 PM **CC 103**

Haimo Presentation to Math Teachers' Circle Judith Covington

1:00-5:50 PM **CC 007A**

AMS Special Session on Math Teachers' Circles and the K-20 Continuum

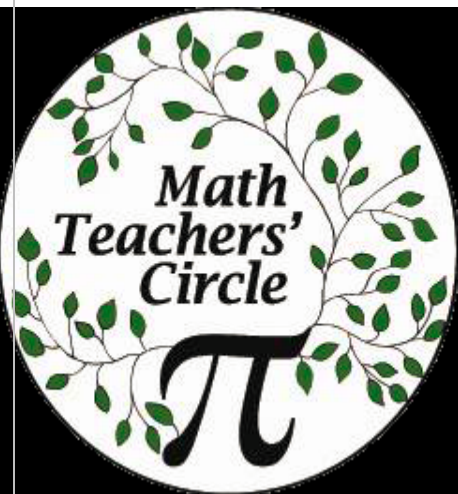
Brian Conrey, American Institute of Mathematics;
Michael Nakamaye and Kristin Umland University of New Mexico;
Diana White, University of Colorado at Denver

6:00 – 8:00 PM National Association of Math Circles Dinner

Text to 775-722-0658 and ask for details

I must study politics and war that my sons may have liberty to study mathematics and philosophy.

John Adams



TUESDAY, JANUARY 13

MAA Session on What Makes a Successful Math Circle

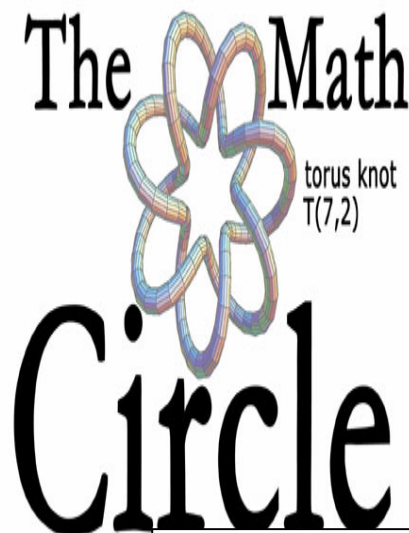
Organization and Problems **CC 214C**

Session I 8:00-11:55 AM

Session II 1:00-3:15 PM

Philip Yasskin, Texas A&M University
Tatiana Shubin, San Jose State University
Paul Zeitz, University of San Francisco
Katherine Morrison, U of Northern Colorado

SEE 2-PAGE SUPPLEMENT FOR TITLES, PRESENTERS AND THE SCHEDULE



"Patience is my virtue, but only in Math, Daddy," - Ashley"

- Ryanne Salve, *She's Older Than Me*

"How is it that there are so many minds that are incapable of understanding mathematics? ... the skeleton of our understanding, ... and actually they are the majority. ... We have here a problem that is not easy of solution, but yet must engage the attention of all who wish to devote themselves to education."

- Henri Poincaré, *Science and Method*

AMS SPECIAL SESSION MONDAY **CC007A** 1:00-5:50 PM

1:00 p.m.

Mathematics of MTC's spanning the K-20 Spectrum.

Michael Nakamaye, University of New Mexico

1:30 p.m.

Northern Colorado Math Teachers' Circle's Implementation of Common Core State Standards.

Katherine Morrison, University of Northern Colorado (SIGMAA MCST Chair)

Gulden Karakok, University of Northern Colorado

2:00 p.m.

Drawing on Effective Professional Development Research: Using a Pedagogical-Content Model in the Philadelphia Area Math Teachers' Circle (PAMTC).

Joshua A. Taton, University of Pennsylvania Graduate School of Education

Amy N. Myers, Bryn Mawr College Cathryn Anderson, Washington Township School District

Stephen Bartholomew, The Philadelphia School

2:30 p.m.

Quirky Mathematics: Its Joy and its Pedagogical Value.

James Tanton, MAA

3:00 p.m.

Modeling with Mathematics:

MTC sessions that encourage this CCSS Mathematical Practice.

Michelle A Manes, University of Hawaii at Manoa

3:30 p.m.

Establishing and Maintaining a Math Teachers Circle.

Fawn P Nguyen*, Mesa Union Junior High

4:00 p.m.

Mathematics Departments hosting MTCs.

Brian Conrey*, American Institute of Mathematics

4:30 p.m.

Baa Hozho': The Navajo Nation Math Circle Project.

Bob Klein, Ohio University (SIGMAA MCST Chair Elect)

5:00 p.m.

Using Math Teachers' Circles to Sustain a K-16 Partnership: Teachers and University Faculty.

W. James Lewis and Michelle Homp, University of Nebraska-Lincoln

Angie Hodge, University of Nebraska at Omaha

5:30 p.m.

Math Teacher Circles: Sustaining an NSF Math Science Partnership.

Amy Cohen, Rutgers University

"I have come to believe that a great teacher is a great artist and that there are as few as there are any other great artists. Teaching might even be the greatest of the arts since the medium is the human mind and spirit." **John Steinback**

"You can get help from teachers, but you are going to have to learn a lot by yourself, sitting alone in a room." **Dr. Seuss**