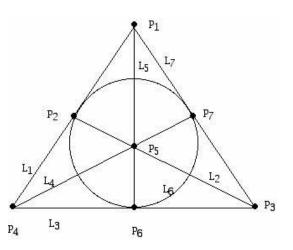
Madison Math Circle 2013-14





The Madison Math Circle is an outreach program aimed at giving middle school and high school students a taste of interesting ideas in math and science. At weekly meetings, a mathematician–typically from the University of Wisconsin, Madison math department–introduces a topic and provides problems for the students to explore.

Overview

We had 17 meetings covering a wide range of topics including: origami and mathematics, the card game Set and finite geometry, and the mathematics of juggling.

We also saw substantial growth over the course of this year: we went from 7 meetings in the fall to 10 meetings in the spring, and our average attendance grew by about 75%. Much of this growth was due to support from two sources: Jennifer Koziar at Queen of Peace Middle School, and Katie Wolf of the Growing Elementary Math Students program.

Outstanding Math Circle Presentation Awards

This year, we gave our inaugural Outstanding Math Circle Presentation Awards to two graduate students: **Theodora Hinkle** and **Reese Johnston**. Winners are selected based on feedback from students, parents, and organizers.

Theodora Hinkle is a graduate student in computer science who is interested in machine learning, and has interned at Google and Networked Insights. She gave two Math Circle presentations related to sorting algorithms. Students invented their own sorting algorithms and then experimented to see which were most efficient.

Reese Johnston is a third-year graduate student in mathematics who is interested in logic and computability. He gave two consecutive Math Circle presentations on "The Mathematics of Lying", focusing on logical puzzles involving liars and truth-tellers.



Presenters

Our presenters included many UW-Madison graduate students (marked with an *) and faculty.

Uri Andrews Gheorghe Craciun Jordan Ellenberg Daniel Erman Theodora Hinkle* Chris Janjigian* Matthew Johnston Reese Johnston* Jonathan Kane Daniel Ross* Betsy Stovall Jean-Luc Thiffeault Mimansa Vahia*

Budget

Our budgetary needs were provided by generous support from the University of Wisconsin-Madison Department of Mathematics and from an anonymous local donor.

- \$1,230 on pizza
- \$300 on honorariums for our graduate co-organizers
- \$60 on supplies

As we grow, we expect these expenses to continue to rise, and we will be asking for donations from parents starting in 2014-15.

Graduate Student Co-Organizers

Lalit Jain has been a graduate coorganizer for the past three years. He taught high school mathematics in San Francisco and is interested in number theory.

In addition, starting this January we added two new graduate student coorganizers: **Carolyn Abbott** and **Ryan Julian**. Carolyn is a former high school teacher working in geometric group theory. Ryan worked with several math outreach programs at the University of Chicago and is interested in number theory.



Want to help?

We rely on the support of parents, students, teachers, mathematicians, and many others to run the Madison Math Circle. Here's what you can do:

- Post our flyer at your child's school! (You can find the flyer on our website.)
- Spread the word among teachers or parents who might be interested!
- Donate to Math Circle!
- Volunteer to give a talk or suggest a presenter or topic!

Contact Daniel Erman (math-circle-organizers@math.wisc.edu) with any questions.