

Sonia Kovalevsky Math Day for Girls: The Art of Mathematics

Saturday, March 16, 2024

8:45-9:00	Check-in	
9:00-9:20	Welcome and Introduction	AWM Student Volunteers
9:20-10:20	Mathematics of Origami	Dr. Manda Riehl (Math)
10:30-11:30	Interior Flowers	Dr. Al Holder (Math) and students
11:30-12:15	Discussion of Women in STEM	AWM Students & Rose Faculty
12:15-12:45	Lunch	
12:45-1:15	Campus Tour & Group Photo	AWM Student Volunteers
1:15-2:15	Holding it Together With String: The Mathematics of Weaving	Dr. Josh Holden (Math)
2:15-3:00	Cobwebbing	Dr. Jeremy Harris (Math)
3:00-3:15	Closing Remarks	

Activity Descriptions:

Mathematics of Origami (Dr. Manda Riehl): Origami began as a Japanese art of paper folding, but more recently has had surprising applications in engineering, thanks to people thinking about this art form mathematically. We will learn about the art AND the math, and fold our own miniature solar sail.

Interior Flowers (Dr. Al Holder and Rose-Hulman Students): Create a flower in a regular n -polygon with analytic central paths, and then print your flower for a keepsake. This project combines mathematics with engineering and computation to create unique and aesthetic mementos.

Holding it Together With String: The Mathematics of Weaving (Dr. Josh Holden)

Cobwebbing (Dr. Jeremy Harris): Use the geometry of a graph to create beautiful and interesting patterns by iterating a certain procedure.

Plus more activities and discussions about women in mathematics with Rose-Hulman students and faculty!

Want to learn more? Contact [Dr. Sylvia Carlisle](#), associate professor of mathematics.