

March MATHness

**Math competition, lectures and activities
for high school students**

Saturday, March 19

10 a.m.–4:45 p.m.

CHAMBERS BUILDING • DAVIDSON COLLEGE

Lectures

Six Degrees of Separation

Michael Mossinghoff, Davidson College

Ever heard that any two people on earth can be connected using a chain of at most six personal acquaintances, or that any movie star can be linked to Kevin Bacon in just six steps? See some of the mathematics behind these “six degree” phenomena!

Math and Art: The Good, the Bad and the Pretty

Annalisa Crannell, Franklin & Marshall College

How do we fit a three-dimensional world onto a two-dimensional canvas? We'll learn where to stand as we view a painting so that it pops off that two-dimensional canvas, and explore the mathematics behind perspective paintings, which starts with simple rules and leads to really tricky puzzles.

Flippin' Flapjacks: Solving the Pancake Problem

Laurie Heyer, Davidson College

What do pancakes and genomes have in common? Both can be flipped and rearranged into different orders. Heyer will explain the pancake model for genome rearrangements, and show how the pancake problem can be connected to graph theory and studied with Markov Chains.

Counting to Infinity

Richard Neidinger, Davidson College

How can we measure the number of things in an infinite set? Do some infinite sets contain more things than others? Starting with a toddler's understanding of numbers, let's go to infinity and beyond!

Activities

Math and Origami

Participants will get hands-on experience with the art and science of paper-folding. They will discover some of the connections between mathematics and origami, and leave with a piece of art that tells a mathematical story.

Your Name in Space!

Why leave the letters in your name flat and lifeless when you can give them 3-D depth and fullness? Come get your new-and-improved math/art today, and draw your name in 3-D, using quick-and-easy tricks from 1-point perspective drawing! Offer available while art supplies last.

March MATHness Tournament

Compete in a single-elimination, bracketed tournament where teams of four students try to outwit their opponents. The competition will have eight teams, so find your teammate and register.

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Register at www.marchmathness.eventbrite.com.

