# FSU MATH FUN DAY

## SCHEDULE OF EVENTS

FEBRUARY 1, 2025 1:00pm - 5:00pm



### SPONSORED BY:

COLLEGE OF ARTS & SCIENCES
DEPARTMENT OF MATHEMATICS

## WELCOME TO THE DEPARTMENT OF MATHEMATICS AT FSU!

Our mission is to preserve, expand, and disseminate mathematical knowledge. We run one of the top graduate programs in the mathematical sciences in the Southeast, and we offer a vast array of academic opportunities to our undergraduates.

We welcome you to our department and hope you enjoy your time at FSU Math Fun Day!

## ACTIVITY ROOMS—GROUND, FIRST, & SECOND FLOORS

Activity rooms are an open house style event, where people can come and go.

## GROUND FLOOR (stairwell / elevator access near the registration desk by LOV 101)

## LOV 022: Exploring Polygons through Computer Programming - Grades 3+

Learn about polygons while working through challenges in MIT's Scratch programming environment. No prior programming experience is needed! Grades 3+ but younger children are welcome to see how far they can get as! This activity is supported in part by a CSIMMS NSF Grant.

## FIRST FLOOR

## LOV 101: The Dilemma Game! (Sign-up Required Outside the Room) - Grades 5+

Play cooperative games to learn about the mathematical field of Game Theory. Choose your next move carefully as you will influence the game outcome of all players. What a dilemma!

Sessions every 30 minutes, so sign up outside the room!

#### LOV 102: Fractals – All Ages

Fractals are infinitely repeating patterns. Learn what fractals are, and come create your own in 2D and 3D using geometry or a computer!

#### **Other Activities**

Sea-to-See touch tanks: discover the mathematical intricacies of the snail shell.

Awesome bubbles with 3D shapes!

Try our scavenger hunt!

## LOV 103: Math in Nature – All Ages

Organized by the FSU Society of Undergraduate Math Students (SUMS)

Discover where math appears in nature, music, art, DNA, plants, and animals.

#### LOV 105: Secret Codes and Puzzles - Grades 5+

Create your own secret codes and ciphers; find out how to decipher messages! Be challenged by other mathematical puzzles and riddles!

## LOV 106: Easy as Pi with Featured Faculty – All Ages

Join faculty in a variety of hands-on mathematical activities. Try activities with numbers, shapes, & software-defined radio! Or, just come and chat about math!

## **LOV 107: Mathematical Games** – All Ages

Try your hand at 3D tic-tac-toe and other games. Learn mathematical strategies for playing various games!

## SECOND FLOOR

## LOV 204A: Geometric Constructions – All Ages

Build polyhedral and other shapes with mathematical construction tools, such as Zome.

## **LOV 231: Symmetries and Patterns** – All Ages

Explore geometries through easy to make models. Find hidden symmetries by folding your own hexaflexagons and origami shapes. Try our challenges and puzzles.



## LOV 232: Women in Mathematics – All Ages

## Organized by the FSU Student Chapter of the Association of Women in Mathematics

Hands on activities demonstrate where women have made mathematical discoveries.



## LOV 106: EASY AS PI WITH FEATURED FACULTY

Join faculty in a variety of hands-on mathematical activities. Recommended for all ages.



### Dr. Mario Flores Gomez, Postdoctoral Scholar in Mathematics

Card Games – Play this card game and find out where there is some hidden geometry!

## **Dr. Sanghyun Lee**, Associate Professor of Mathematics

AI Games – Play some AI games and learn how Math is contributing to the fields of AI and Machine Learning!

#### **Dr. Thang Nguyen**, Assistant Professor of Mathematics

Polyominoes are shapes used in the games of Blokus and Tetris. Try out some new math games and puzzles!

## Dr. Jon Ahlquist, Retired Associate Professor of Meteorology

Software-Defined Radio (SDR) is the future of radio communication! Become part of this fast-developing technology where most of a traditional radio is replaced by a computer and software.

## **BLAST** (Big-Bend/Leon Association for STEM Teaching)

Equilibrium Engineers – Try this challenge to see where Math is used in applications!

#### SIGN-UP ACTIVITY

#### Dr. Bryce Morsky, Assistant Professor of Mathematics

**Room 101** – The Dilemma Game! Play cooperative games where you influence the outcome of other players! Time: Every 30 minutes Recommended: Grades 5+

#### Thank You Volunteers!

Over 100 student, faculty and staff volunteers contribute to FSU Math Fun Day!

Please consider donating to the Department of Mathematics to support outreach activities, student organizations, research, and guest speakers. Search on "Math General Fund" to donate!



**Thank You for Coming!** Dr. Monica Hurdal, Professor of Mathematics & Director of FSU Math Fun Day Email: mhurdal@math.fsu.edu Web: www.math.fsu.edu/MathFunDay

We hope to see you next year!

Like us on Facebook: FSU Math Fun Day