

Pi Day 2019
Mathematics Festival
Saturday, March 16th, 12:30-3:00 PM
Knox Hall, University at Buffalo

This Year's Theme is
“Computational Math: Explore Relationships between Computers and Mathematics”

This festival is free and open to all and is aimed at families with middle and high school children as well as mathematics teachers

Featured Presentation

“Blockchain Foundations in Math”

Join Bina Ramamurthy - Department of Computer Science and Engineering at UB
Knox 109, 12:30 PM

It is an exciting time to be a student of math. The emerging technology blockchain owes its existence to its strong mathematical foundations in cryptography, hashing and puzzles (yes, puzzles). We will begin this session with a mystery, the genesis of blockchain. Let's see if we can solve this mystery by exploring some known facts. We will peek into a real blockchain to look at the transactions, blocks and chain of blocks: its structure and operation. Then we will examine the beauty of public key cryptography and its role in blockchain operation with some hands-on examples. We will solve the mining puzzle of the blockchain with a paper-pencil example. Mining depends on hashing algorithms. Blockchain solves decentralized problems. Let's look at some of the decentralized applications (Dapps). Finally, we will explore a web environment that you can use to develop applications on blockchain and apply all of your math knowledge.

Hands-on Table Stations

- *Simulations to Compute Pi*
- *Computational Wearables*
- *Binary Numbers Magic*
- *And More!*

12:30 - 3:00 PM

“Prediction by the Numbers”

A movie presentation about using computers to forecast the future and why those forecasts succeed or fail

Knox 104, 2:15 PM