MATTHEW J. KUKLA

mkukla1@umd.edu

http://math.umd.edu/~mkukla1 <> http://mkukla.net

EDUCATION

University of Maryland

Mathematics, BSc.

Expected 2022

WORK EXPERIENCE

The Math Citadel

Spring 2019 - present

Researcher

- · Conducted research in fuzzy set theory and network theory
- · Developed numerous software packages
- · Contributed to several technical articles
- · Addressed website security issues

Patton Electronics

Summer 2016

Software Engineering Intern

 $Gaithers burg,\ MD,\ USA$

- · Developed a Linux-based operating system for VDSL router prototype
 - Wrote, compiled, and patched hardware-specific kernel modules
 - Tested kernel builds
 - Organized and documented existing codebase

SKILLS

Languages C, OCaml, Python, Java, MATLAB, Shell, Haskell, Fortran Linux, UNIX (*BSD and Solaris), MS-DOS, Microsoft Windows

Web HTML, CSS, Apache, Gopher Tools LATEX, Git, NEC2, SQL

PUBLICATIONS AND PREPRINTS

Logical Limit Laws for Layered Permutations and Related Structures

Authors: Samuel Braunfeld, Matthew Kukla (2021) Published, Enumerative Combinatorics and Applications.

Colored Convex Linear Orders and Logical Limit Laws

Authors: Matthew Kukla (2021)

Preprint.

Rings of Typed Ordered Fuzzy Numbers

Authors: Matthew Kukla, Rachel Traylor (2020)

Preprint, arXiv:2010.07764.

TALKS AND PRESENTATIONS

Logical Limit Laws for Layered Permutations and Related Structures University of Maryland Logic Seminar (2022)

Categorical Mirror Symmetry of Elliptic Curves (two lecture series)

University of Maryland Geometry and Physics Seminar (2018)

Generalized Calabi-Yau Manifolds

University of Maryland Geometry and Physics Seminar (2018)

CONFERENCES

University of Maryland Geometry Festival

University of Maryland (May 2019)

Witt Vectors, Deformations, and Absolute Geometry

University of Vermont (June 2018)