

MATTHEW J. KUKLA

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EDUCATION

University of Maryland
Mathematics, BSc.

May 2022
College Park, MD, USA

WORK EXPERIENCE

The Math Citadel
Researcher

Spring 2019 - present

- Conducted original research in fuzzy algebra and network theory
- Developed numerous software packages
- Contributed to technical articles
- Rebuilt website for improved performance and security

Patton Electronics
Software Engineering Intern

Summer 2016
Gaithersburg, MD, USA

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

SKILLS

Languages	C, OCaml, Python, Java, MATLAB, Shell, Haskell, Fortran
Operating Systems	Linux, UNIX (*BSD and Solaris), MS-DOS, Microsoft Windows
Tools	L ^A T _E X, Git, NEC2, SQL, GNU Radio
Web	HTML, CSS, Apache, Gopher

RESEARCH AND PUBLICATIONS

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)