

CURRICULUM VITAE

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EDUCATION

PhD IN MATHEMATICS (in progress)

Sep 2022 – Present University of Toronto, St. George Campus
PhD Advisor: Elden Elmanto

M.Sc. IN MATHEMATICS

Oct 2021 – July 2022 University of Oxford, St Edmund Hall
M.Sc. in Mathematical Sciences, Distinction

B.A. IN MATHEMATICS

Aug 2017 – May 2021 University of California, Berkeley GPA: 3.939
B.A. in Mathematics, Highest Honors
High distinction in General Scholarship

TEACHING EXPERIENCE

TAships (UofT St George campus):

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| Spring 2026: | MAT267: Advanced Ordinary Differential Equations |
| | MAT401: Polynomial Equations and Fields |
| Fall 2025: | MAT334: Complex Variables |
| Spring 2025: | MAT223: Linear Algebra I |
| Spring 2025: | MAT224: Linear Algebra II |
| | MAT267: Advanced Ordinary Differential Equations |
| Fall 2024: | MAT224: Linear Algebra II |
| | MAT327: Introduction to Topology |
| Summer 2024: | MAT235: Multivariable Calculus |
| Winter 2024: | MAT224: Linear Algebra II |
| Fall 2024: | MAT224: Linear Algebra II |
| Summer 2023: | MAT301: Groups and Symmetries |
| Winter 2023: | MAT136: Calculus II |
| Fall 2022: | MAT135: Calculus I |

CONFERENCES + WORKSHOPS

Feb. 2026: Midwest Topology Seminar
Oct. 2025: Equivariant, Motivic, and Physical Topology in the Midwest
Oct. 2025: Ontario Topology Seminar
Sep. 2025: European Autumn School in Topology (EAST)
July 2025: Summer Research Institute in Algebraic Geometry
Apr. 2025: Graduate Student Topology and Geometry Conference (GSTGC)
Dec. 2024: Life After the Telescope Conjecture (SLMath)
Aug. 2024: Talbot Workshop: Topological Cyclic Homology of Ring Spectra
Mentored by Jeremy Hahn and Allen Yuan
July 2024: PCMI Graduate Summer School: Motivic Homotopy Theory
June 2024: Ontario Graduate Mathematics Conference
May 2024: Atlantic TQFT Spring School
Oct. 2023: FRG Workshop on Brauer Groups and Derived Categories

TALKS

Sep. 2025: EAST: Abelian Categories
Apr. 2025: GSTGC: Geometric Crystallinity
Mar. 2025: Bird's Eye Conference (@UofT): Motivic Filtrations
June 2024: Ontario Graduate Mathematics Conference: What is Algebraic K-theory?
Mar. 2024: Bird's Eye Conference (@UofT): An Introduction to p-Adic Geometry

OTHER ACTIVITIES

Directed Reading Program (University of Toronto):

Spring 2026: Introduction to p-Adic Hodge theory

Spring 2025: Introduction to Hodge theory (following Voisin)

Math Mentorship Program (University of Toronto):

Spring 2026: 3 Mentees: Topic TBD

Spring 2024: 1 Mentee: Complex analysis

Spring 2023: 1 Mentee: Taran Singh: Category theory and linear algebra

RESEARCH EXPERIENCE

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| Summer 2020 | Numerical Covers of the Modular Surface Supervised by Alex Kontorovich Rutgers University DIMACS | REU Participant |
| Fall 2018 | Ji Lab (Cortical Fear Learning) Supervised by Ryan Natan UC Berkeley departments of MCB and Physics | Undergraduate volunteer |
| Summer 2018 | Sims-Lucas Lab (Nephrology) Supervised by Takuto Chiba Children's Hospital of Pittsburgh | Paid intern |

PUBLICATIONS

1. **Shaikh KJ**, Rajakumar V, Osio VA, Shaikh N. (2021). Neutrophil gelatinase-associated lipocalin for urinary tract infection and pyelonephritis: a systematic review. *Pediatric Nephrology*, 36, 1481-1487.
 2. Chiba T, Cerqueira D, Li Y, Bodnar AJ, Mukherjee E, Pfister K, Phua, YL, **Shaikh KJ**, Sanders B, Hemker S, Pagano PJ, Wu YL, Ho J, Sims-Lucas S. (2021). Endothelial-derived miR-17~ 92 promotes angiogenesis to protect against renal ischemia-reperfusion injury. *Journal of the American Society of Nephrology: JASN*, 32(3), 553.
 3. **Shaikh KJ**, Osio V, Shaikh N, et al. (2020). Procalcitonin, C-reactive protein, and erythrocyte sedimentation rate for the diagnosis of acute pyelonephritis in children. *Cochrane Database of Systematic Reviews*, Issue 9. Art. No.: CD009185.
 4. Hum SW, **Shaikh KJ**, Musa SS, et al. (2019). Adverse Events of Antibiotics Used to Treat Acute Otitis Media in Children: A Systematic Meta-Analysis. *The Journal of Pediatrics*, 215, 139-143.
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LANGUAGES

English (fluent), Spanish (conversational), French (intermediate),
Chinese (普通话, intermediate), Farsi (beginner), Tibetan (beginner)

INTERESTS

Birding, Classical Persian Music (setar)