

CURRICULUM VITAE

Name: Kai Shaikh **Website:** kaishaikh.github.io
Email: kshaikh@math.toronto.edu **Mobile Phone:** +1-412-721-2998

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):

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: Category theory and linear algebra

RESEARCH EXPERIENCE

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.

LANGUAGES

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

INTERESTS

Birding, Classical Persian Music (setar)