

Krishanu Sankar

[\[Email\]](#) | [\[Website\]](#) | [\[Linkedin\]](#) | [\[Github\]](#) | [\[Google Scholar\]](#)

Employment

Amazon Web Services, Center for Quantum Computing Sep 2022 – Nov 2024
Quantum Research Scientist

1QB Information Technologies Sep 2019 – Jun 2022
Research Scientist

University of British Columbia Sep 2017 – Aug 2019
Postdoctoral Fellow

Education

Massachusetts Institute of Technology Sep 2008 – Jun 2012
B.S., Mathematics

Harvard University, Department of Mathematics Sep 2012 – Jun 2017
Ph.D. in Mathematics

Published Research

- [1] C. Leroux et al. “Snakes and Ladders: Adapting the Surface Code to Defects,” *PRX Quantum*, vol. 6 (2025). [\[paper link\]](#) [\[software link\]](#)
- [2] H. Putterman et al. “Hardware-efficient quantum error correction via concatenated bosonic qubits,” *Nature*, vol. 638, 927–934 (2025). [\[link\]](#)
- [3] S. Lin, E. Peterson, K. Sankar, and P. Sivarajah, “Spatially parallel decoding for multi-qubit lattice surgery,” *Quantum Science and Technology*, vol. 10(3) (2025). [\[link\]](#)
- [4] K. Sankar et al., “A Benchmarking Study of Quantum Algorithms for Combinatorial Optimization: Unitary versus Dissipative” *npj Quantum Information*, vol. 10(64) (2024). [\[link\]](#)
- [5] K. Sankar and Dylan Wilson, “On the C_p -equivariant dual Steenrod algebra,” *Proceedings of the American Mathematical Society*, 150(8), 3635–3647 (2021). [\[link\]](#)
- [6] K. Sankar, “Equivariant Steinberg Summands,” *Homology, Homotopy and Applications*, vol. 22(2) (2020). [\[link\]](#)
- [7] Lynn Chua and K. Sankar, “Equipopularity Classes of 132-Avoiding Permutations,” *Electronic Journal of Combinatorics*, vol. 21(1) (2014). [\[link\]](#)
- [8] K. Sankar, “Achievable Sets in $\mathbb{Z}^n$,” *Forum Mathematicum* (2011). [\[link\]](#)

University Teaching

Spring 2019	Mathematical Proof (Math 220)	UBC
Fall 2018	Differential Calculus for the Life Sciences (Math 102)	UBC
Spring 2018	Mathematical Proof (Math 220)	UBC
Fall 2017	Differential Calculus for the Life Sciences (Math 102)	UBC
Spring 2017	Linear Algebra and Differential Equations (Math 21b)	Harvard
Fall 2015	Integration, Series, and Differential Equations (Math 1b)	Harvard
Spring 2014	Integration, Series, and Differential Equations (Math 1b)	Harvard

Other Teaching, Mentorship, and Educational Development

Math Potentials, Math Circles Omega level, Instructor Sep 2025 to May 2026

Art of Problem Solving, Course Instructor 2020 - 2021

Enroot, Mentor (Cambridge, MA) 2016 - 2017

PROMYS, Research Labs Coordinator (Boston, MA) Summer 2016

Global Math Circle

Instructor Spring 2015

Teacher Training Institute Facilitator Summer 2015

Math Olympiad Summer Program, Grader (Lincoln, NE) Summer 2009