

Chen-wei (Milton) Lin
Department of Mathematics
Johns Hopkins University
Baltimore, MD 21218
clin130@jhu.edu
+1 4434676477

December 2, 2024

California Institute of Technology
Mathematics Department 253-37
ATTN: Search Committee
1200 E. California Blvd.
Pasadena, CA 91125

Dear Members of the Appointment Committee,

I am Chen-wei (Milton) Lin, a Ph.D. candidate in pure mathematics at Johns Hopkins University, focusing on arithmetic geometry, geometric Langlands, homotopy theory. Under the supervision of Professor David Gepner, I expect to complete my degree in May 2025.

During my final academic year, my research interests have expanded beyond my thesis work to include foundational aspects of machine learning. I have focused on applying categorical and algebraic techniques to better understand neural networks, leading to ongoing collaboration with Chris Hillar from Redwood Research. I am particularly interested in exploring the intersection of artificial intelligence and mathematics, and I am writing to apply for the Postdoctoral Researcher position in AI and Mathematics under Professor Sergei Gukov.

My cover letter, curriculum vitae, and list of publications are enclosed with this application. In addition, I have arranged for three research letters from mathematics professors—David Gepner (gepner@jhu.edu), Yiannis Sakellaridis (sakellar@jhu.edu), David Hansen (dhansen@nus.edu.sg) and Xinwen Zhu (zhuxw@stanford.edu)—and one letter from a computer science professor, Daniel Khashabi (danielk@cs.jhu.edu).

Please let me know if there is anything else I can provide. Thank you in advance for your consideration.

Sincerely,

A handwritten signature in black ink, consisting of a stylized 'C', 'W', and 'L' joined together.

Chen-wei (Milton) Lin