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

February 5, 2025

222 College Street 2nd floor Toronto, Ontario Canada M5T 3J1

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, and homotopy theory. Under the supervision of Professor David Gepner, I expect to complete my degree in May 2025. I wish to transition to the field of foundational research in the mathematics of neuroscience and AI, applying my mathematical background. I am writing to apply for the Fields Postdoctoral Fellowship (FPDF) and Fields-Ontario Postdoctoral Fellowship (FOPDF) for position on the Mathematics of Neuroscience program. I look forward to collaborating with and learning from the many researchers affiliated with the institute, particularly Professors Carina Curto, Maia Fraser, and John Griffiths, whose work I greatly admire and from whom I hope to gain valuable insights.

Members of of sponsoring universities whom I wish to collaborate with are:

- University of Toronto: Richard Zemel, Chris J. Maddison, and Roger Grosse.
- University of Waterloo: Wenhu Chen

My cover letter, curriculum vitae, research statement are enclosed with this application. In addition, I have arranged for one research letter from mathematics professors – David Gepner (gepner@jhu.edu), Yiannis Sakellaridis (sakellar@jhu.edu), and Xinwen Zhu (zhuxw@stanford.edu) – as well as two letters from researchers in the field of machine learning, Professor Daniel Khashabi (danielk@cs.jhu.edu) and Dr. Chris Hillar, (cav@mac.com).

Thank you in advance for your consideration.

Sincerely,

Chen-wei (Milton) Lin