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

November 16, 2024

Heilbronn Institute, School of Mathematics, University of Bristol 2.85, Fry Building, Woodland Road Bristol, BS8 1UG United Kingdom

Dear Members of the Appointment Committee,

I am writing to apply for the Heilbronn Research Fellowship. As a Ph.D. candidate in pure mathematics at Johns Hopkins University under the supervision of Professor David Gepner, I focus on arithmetic geometry, the geometric Langlands program, higher category theory and the foundations of machine learning. I expect to complete my degree in May 2025.

The Heilbronn Fellowship's emphasis on both pure mathematics and interdisciplinary research aligns with my academic interests. I am excited about the opportunity to contribute to your vibrant research community. I have provided further details about my interest in the fellowship in the application question titled "Please explain why you are interested in this particular fellowship?"

Enclosed are my curriculum vitae and research statement. I have arranged for recommendation letters from the following professors:

- David Gepner (Mathematics, Johns Hopkins University), gepner@jhu.edu
- Professor Yiannis Sakellaridis (Mathematics, Johns Hopkins University), sakellar@jhu.edu
- Professor Xinwen Zhu (Mathematics, Stanford University), zhuxw@stanford.edu
- Daniel Kahshabi (Computer Science, Johns Hopkins University), danielk@cs.jhu.edu, who will provide a recommendation from the Computer Science perspective.

Thank you for considering my application. Please let me know if there is any additional information I can provide.

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Sincerely,

Chen-wei (Milton) Lin