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Hiring Committee
Brown University
Box 1995
Providence, RI 02912

Dear Members of the Hiring Committee,

I am applying for the Simons Bridge Postdoctoral Fellowship at Brown University. I completed a Ph.D. in mathematics at the University of Pittsburgh, advised by G. Bard Ermentrout, and I am now a postdoc at Brandeis University, advised by Thomas G. Fai.

I am an ambitious applied mathematician who positions himself at the forefront of multidisciplinary discoveries, including mathematics and biology. I developed my mathematical repertoire at Pittsburgh by applying dynamical systems theory to reduce the dimensionality of famous neural models, aiding in novel insights into these systems. My research resulted in winning the prestigious Andrew Mellon Predoctoral Fellowship, awarded to doctoral students of exceptional promise and ability. I was the first math-bio student at the University of Pittsburgh to receive this award.

The quality of my research has continued to improve as a postdoc. At the University of Pennsylvania, I collaborated closely with neuroscientists and introduced ground-breaking insights and models for data produced by the world's leading auditory labs. At Brandeis, I have continued to develop my abilities as an independent mathematician while contributing to multiple fields, including coupled oscillators and molecular motor dynamics. Much of my recent work is collaborative but largely independent.

I identify **Björn Sandstede** as a potential host. My skillset will bolster existing faculty's work through collaborations, and complement their work through independent research. I offer a decade's worth of experience in problems of oscillator entrainment and synchrony, and firmly believe that my presence will bolster Brown's reputation in applied mathematics.

As part of my application I include a curriculum vitae, publication list, and research statement. Please request additional details as needed, and I look forward to our correspondence.

Sincerely, Youngmin Park, Ph.D.