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Recruiting Committee
Department of Mathematics, Malott Hall
Cornell University
Ithaca, NY 14853-4201

Dear Recruiting Committee,

I am writing to be considered for the position of H. C. Wang Assistant Professor. I am also eligible to be a VIGRE Postdoctoral Associate. I am a Ph.D candidate in the Department of Mathematics at Brown University working with Joseph Silverman in the fields of algebraic dynamics and number theory. My expected date of completion is May 2005.

My research interests include dynamics over finite and p -adic fields, Galois theory, and applications of probability theory to algebra. In my Ph.D. thesis I use Galois theory and the theory of martingales to show that the p -adic hyperbolic Mandelbrot set has density zero. As detailed in my research statement, this project offers several directions for further research within number theory and algebraic dynamics. I believe that my research interests match well with the interests of several faculty members at Cornell, in particular Ravi Ramakrishna.

As my curriculum vitae indicates, I have taught several sections of calculus and linear algebra at Brown. I have enjoyed and learned from this experience, and I look forward to teaching both these and other courses such as abstract algebra, probability, and elementary complex dynamics. I have also worked extensively with Brown University's Harriet W. Sheridan Center for Teaching and Learning in Higher Education, where I have gained experience training beginning graduate TAs and instructors.

I have submitted with my application a curriculum vitae, a research statement, and four letters of recommendation. In addition I have posted other materials at

<http://www.math.brown.edu/~jones/>

These include: a teaching statement; a summary of teaching evaluations; an introduction to my thesis; and a copy of my prize-winning article in *Mathematics Magazine* on drawing fractions in different bases.

I will also be attending the AMS/MAA joint meeting in Atlanta in January, and would be happy to meet there. From December 18 until January 10 the best way to contact me is via e-mail at the address given above. Thank you very much for your consideration.

Sincerely,

Rafe Jones