



DEPARTMENT OF MATHEMATICS
COLLEGE OF ARTS AND SCIENCES

Professor Aloysius G. Helminck
North Carolina State University
Department of Mathematics
Box 8205
Raleigh, NC 27695-8205

Dear Professor Helminck:

This letter is in regards to the formal submission of my application for the tenure-track position currently open at the Mathematics Department at North Carolina State University.

I completed my doctorate in Mathematics at Purdue University in August 2007 under the direction of Prof. Bradley J. Lucier. Immediately following graduation I began a postdoctoral appointment as a Research Assistant Professor for the University of South Carolina. I am currently an instructor at the University of South Carolina. I will attend the Joint Mathematics Meeting in Boston and would be very glad if I could meet with a representative from your department there.

I want to pursue a career based on teaching, research (with an emphasis on bringing undergraduate students into my work) and service to your University. I desire to make a difference in the life of the community where I shall settle and help provide an enjoyable and valuable experience for my students—in particular, for those coming from minority groups and although not exclusively, mainly for students with Hispanic background. I view the Mathematics Department at North Carolina State University as an ideal place to work because of its values, reputation and location, and I think you will find my interests well matched to your search.

I have about 20 years of teaching experience, mostly at the University level, although I have had the pleasure to instruct students of all ages in many different disciplines—not only Mathematics. I am deeply committed to the effective use of technology in the classroom, and as proof I would like to point you to my professional blog, blancosilva.wordpress.com, where I keep examples on my research, teaching and puzzle creation/solving. I also have a special interest in developing an interdisciplinary curriculum, where my students shall learn how to use mathematical techniques to solve real life problems. I believe I am qualified to teach a broad range of classes, including statistics and probability. You will find from my references that I am, over all, a dedicated instructor.

My research interests include both Analysis and Scientific Computing, specifically in the study and application of Approximation Theory. Recently, the subject of my dissertation (The Curvelet Transform—A Generalized Definition and Approximation Properties) has become popular and many questions remain open. My current work on applications ranges from immunological and epidemiological models of diseases, to image processing of electron microscopy micrographs, or to the design of computational techniques for art authentication—all these with proven potential to attract the interest of students and scholars. I will work hard to secure grant money to support any and all of these adventures in research, so that students under my wing could focus on learning and implementing the techniques in a fruitful environment.

My letters of recommendation have been sent by their authors. Attached are my curriculum vitae (including a list of publications), an AMS cover sheet, research and teaching statements.

I look forward to discussing the qualifications for the position further. I can be contacted at the address listed below, by e-mail at francisco.blanco.silva@gmail.com, or by phone at (803) 386-1822. Thank you for your consideration.

Sincerely,

A handwritten signature in black ink, reading "Francisco Javier Blanco-Silva".

Francisco Javier Blanco-Silva
230 Corley Woods Drive
Lexington, SC 29072