

Philip C. Nelson

Department of Mathematics and Statistics
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Graduate Student
2nd Year

Education

M.S. in Applied Mathematics, University of Maryland Baltimore County, In Progress

Thesis Advisor: Dr. Matthias K. Gobbert

Working Title: *Performance Studies for Time-Stepping Methods used for Reaction-Diffusion Equations*

B.A. in Mathematics, William Paterson University, May 2008

Pi Mu Epsilon, Summa Cum Laude, 3.85 GPA

A.A. in Liberal Arts, Bergen Community College, May 2005

Phi Theta Kappa, Honors, 3.82 GPA

Instructor

Introduction to Mathematical Software Packages: MATLAB – Summer 2009

Tutoring

William Paterson University, January 2006 – May 2008

Basic Skills Mathematics & Algebra with Geometry

College Algebra & Pre-Calculus

Calculus I-III

Quantitative Mathematics I-II

Logic and Higher Methods in Mathematics

Linear Algebra and Differential Equations

Probability and Statistics

Numerical Analysis

Bergen Community College, Summer 2006

Basic Mathematics and Intermediate Algebra

Pre-Calculus, Calculus I-II

Linear Algebra

Contemporary Mathematics

Praxis II Mathematics, New Jersey, Review

Recitation and/or Grading

University of Maryland Baltimore County

Calculus I, Fall 2008

Graph Theory, Fall 2008

Differential Equations, Spring 2009

William Paterson University

Logic and Higher Methods in Mathematics, Fall 2006 – Spring 2008

Calculus III, Spring 2008

Linear Algebra, Fall 2007

Differential Equations, Fall 2007

Numerical Analysis, Fall 2007

Scholarships / Awards

Academic Excellence and Service in Mathematics, William Paterson University, 2008

Marcello Llarull Scholarship, William Paterson University, 2007

Legacy Scholarship Award, William Paterson University, 2007

Russell and Ethel Muter Scholarship, William Paterson University, 2005

Presidential Scholarship, William Paterson University, 2005

Research

Performance Studies for Time-Stepping Methods used for Reaction-Diffusion Equations,
University of Maryland – Baltimore County, Advisor: Dr. Matthias K. Gobbert,
In Progress

Generalized Inverses of Rectangular and Singular-Square Matrices, William Paterson
University, Advisor: Dr. Eswar Phadia, Spring 2008

NSF Grant, *Symmetric Indefinite Bands*, William Paterson University, Advisor: Dr. Linda
Kaufman, Summer 2007-Spring 2008

REU Summer Program in Computational Biology, University of Maryland –
Baltimore County, *Explorations of Takeuchi-Amari Neural Field Theory for
Reorganization of Somatosensory Cortex*, Advisor: Dr. Jonathan Bell, Summer
2007

Additional

Webmaster of SIAM Student Chapter of UMBC, Fall 2008 – Present

Student Research Assistant, Department of Computer Science, Summer 2007- Spring
2008, Advisor: Dr. L. Kaufman

Peer Leader for First-Year Students, William Paterson University, Fall 2007

Math Club, Secretary, William Paterson University, Fall 2007

Pi Mu Epsilon, Chapter President, William Paterson University, Spring 2007- Spring
2008

Math Club, Vice President, William Paterson University, Fall 2006-Spring 2007

Student Advisory Board for College of Science and Health,
William Paterson University, Fall 2006 – Spring 2008

Phi Theta Kappa, Interim Vice President of Fellowship, Bergen Community College,
Spring 2003 – Fall 2003

Conferences

MAA/AMS Garden State Undergraduate Mathematics Competition, William Paterson
University, April 2008

MAA Conference, Saint Peter's University, October 2007

MAA/AMS Garden State Undergraduate Mathematics Competition, Rowan University,
April 2007

Organizations

American Mathematical Society (AMS), January 2009 – Present
Society for Industrial and Applied Mathematics (SIAM), October 2007 – Present
Pi Mu Epsilon, William Paterson University, April 2007 – Present
Pi Lambda Theta, William Paterson University, April 2006 – Present
Phi Theta Kappa, Bergen Community College, February 2003 – Present

Software

MS-DOS, Microsoft Windows, UNIX, Linux RedHat, Fedora
Geometer's Sketch Pad, Mathematica, MATLAB
Microsoft Office and Open Office
HTML
C/C++ Programming Language
LaTeX Typesetting Language

Presentations

Graduate Student Seminar Series, *Mathematical Modeling in Computational Neuroscience*, University of Maryland – Baltimore County, Fall 2008.
MAA/AMS Garden State Undergraduate Mathematics Competition, *Generalized Inverses of Rectangular and Singular-Square Matrices*, William Paterson University, April 2008.
University Research & Scholarship Day, *Symmetric Indefinite Bands*, William Paterson University, April 2008
Senior Capstone Series, *Mathematical Modeling in Computational Neuroscience*, William Paterson University, November 2007.
10th Annual Summer Undergraduate Research Festival, *Explorations of Takeuchi-Amari Neural Field Theory for Reorganization of Somatosensory Cortex*, University of Maryland Baltimore County, August 2007.