

## VITA

### JAMES JOSEPH DUDZIAK

Lyman Briggs College, Michigan State University  
East Lansing, MI 48825  
e-mail: dudziak@msu.edu

#### Personal Data:

Date of Birth: September 25, 1955.  
Nationality: United States Citizen.

#### Degrees:

1976 B.S. in Mathematics, California Institute of Technology.  
1981 Ph.D. in Mathematics, Indiana University at Bloomington.  
Thesis advisor: John B. Conway.

#### Academic Employment:

1976-81 Graduate Assistant, Indiana University at Bloomington.  
1981-82 Visiting Lecturer, Trinity College, Dublin, Ireland.  
1982-83 Research Associate, Michigan State University.  
1983-88 Assistant Professor, Bucknell University.  
1988-89 Visiting Assistant Professor, Indiana University at Bloomington.  
1989-90 Assistant Professor, Bucknell University.  
1990-91 Visiting Associate Professor, Universität Bonn, Germany.  
1991-96 Associate Professor, Bucknell University.  
1996-01 Visiting Associate Professor, Lyman Briggs College of Michigan State University.  
2001-02 On Unpaid Leave, Berkeley, California.  
2002-03 Visiting Associate Professor, University of Tennessee at Knoxville.  
2003-08 Visiting Associate Professor, Lyman Briggs College of Michigan State University.  
2008-10 On Unpaid Leave, Rochester, Minnesota.  
2010- Visiting Associate Professor, Lyman Briggs College of Michigan State University.

#### Other Employment:

Worked during the summers of 2001 and 2002 at Farm Bureau Insurance of Michigan in an entry-level actuarial position.

#### Teaching Experience:

Courses Taught: the Calculus Sequence (both “unregenerate” and “reformed”), Differential Equations, Linear Algebra, Discrete Structures, Foundations of Euclidean and Hyperbolic Geometry, Mathematical Analysis, Calculus-Based Probability & Statistics, and Single Life Contingencies.

Seminars Taught: Hilbert’s Third Problem, Convex Geometry, Combinatorial Geometry, and Computational Geometry.

Independent Studies Taught: Mathematical Logic, Set Theory, Multiple Life Contingencies, and Loss Models.

Besides my ordinary teaching duties, I enjoy giving expository talks to undergraduates. At Bucknell I organized and gave many of the Pi Mu Epsilon math club “Coffee Talks” given by faculty and students. In 1995, the Western Michigan MAA chapter invited me to give the keynote talk for their Math Awareness Week activities. The week’s theme was symmetry and my talk was about the Platonic and Archimedean solids for which I assembled a complete set of models.

## Scholarly Interests:

Function Algebras, Rational Approximation in the Complex Plane, Subnormal Operators, Foundations of Geometry, Mathematical Logic, Set Theory, and Actuarial Science.

With regard to Actuarial Science, I have passed or received credit for the four preliminary actuarial exams (P, FM, M, and C).

## Articles Published:

*Spectral Mapping Theorems for Subnormal Operators* in the Journal of Functional Analysis, Vol. 56, No. 3, May 1983, pp 360-387.

*The Minimal Normal Extension Problem for Subnormal Operators* in the Journal of Functional Analysis, Vol. 65, No. 3, February 1986, pp 314-338.

*A Note on a Theorem of Ahern and Sarason* in the Proceedings of the American Mathematical Society, Vol. 98, No. 1, September 1986, pp 38-40.

*Isometrically Removable Sets for Functions in the Hardy Space are Polar* (with John Conway and Emil Straube) in the Michigan Mathematics Journal, Vol. 34, No. 2, 1987, pp 267-273.

*A Weak-Star Rational Approximation Problem Connected with Subnormal Operators* in the Proceedings of the American Mathematical Society, Vol. 107, No. 3, November 1989, pp 679-686.

*Von Neumann Operators are Reflexive* (with John Conway) in the Journal für die reine und angewandte Mathematik, Vol. 408, 1990, pp 34-56.

*Pointwise Bounded Limits of Rational Functions on the String of Beads* (with John Conway and Mark Melnikov) in The Proceedings Of The Royal Irish Academy, Vol. 95A, No. 1, 1995, pp 29-38.

*Hankel Operators on Bounded Analytic Functions* (with Theodore Gamelin and Pamela Gorkin) in the Transactions of the American Mathematical Society, Vol. 352, No. 1, January 2000, pp 363-377.

## Books Published:

*Vitushkin’s Conjecture for Removable Sets*, Universitext series, Springer Verlag, 2010.

## Books Edited:

*Strange Phenomena in Convex and Discrete Geometry* by Chuanming Zong, Springer-Verlag, 1996.

## Translations:

*Operators on Banach  $C(K)$ -Modules and their Spectral Properties* by Yu. A. Abramovich, E. L. Arenson, and A. K. Kitover in Soviet Mathematics - Doklady, Vol. 38, No. 1, 1989, pp 93-97 (Russian to English).

*Angles between Coinvariant Subspaces and an Operator-Valued Corona Problem* by S. R. Treil' in Soviet Mathematics - Doklady, Vol. 38, No. 2, 1989, pp 394-397 (Russian to English).

*On the Invertibility of Almost Periodic Operators* by V. G. Kurbatov in Math. USSR Sbornik, Vol. 67, No. 2, 1990, pp 367-377 (Russian to English).

*The Stieltjes  $B$ -Integral and the Integration of Spectral Decompositions for some Classes of Contraction Operators* by A. V. Rybkin in Soviet Mathematics - Doklady, Vol. 44, No. 1, 1992, pp 166-170 (Russian to English).

*Spectral Asymptotics of  $M$ -Sectorial Operators* by K. Kh.Boimatov in Soviet Mathematics - Doklady, Vol.45, No. 1, 1992, pp 1-6 (Russian to English).