## Jie Miao

Professor of Mathematics (870)680-8168 jmiao@astate.edu

## **Current Position**

Position Title: Professor of Mathematics Current Academic Rank: Full Professor

Rank Since: Fall 2010

## **Degrees**

Ph.D. Mathematics, Michigan State University, East Lansing, Michigan

1998

M.S. Mathematics, Hangzhou University, Hangzhou, China,1989 B.S. Mathematics, Hangzhou University, Hangzhou, China 1984

# **Scholarly Contributions and Creative Productions**

#### **Journal Publications**

Miao, J. (2008). Bounded Toeplitz Products on the Weighted Bergman Spaces of the Unit Ball. Journal of Mathematical Analysis and Applications, 346(1), 305-313.

Miao, J. (2007). Schatten Class Hankel Operators on the Harmonic Bergman Space of the Unit Ball. Integral Equations and Operator Theory, 59(1), 53-65.

Miao, J. (2004). Commutators on Half-Spaces, Integral Equations and Operator Theory 48, 249- 264.

Miao, J., Zheng D. (2004). Compact Operators on Bergman Spaces, Integral Equations and Operator Theory 48, 61-79.

Miao, J. (2003). Hankel Operators on Harmonic Bergman Spaces of the Unit Ball, Acta Scientiarum Mathematicarum 69, 391-408.

Miao, J. (2003). Commutators on Bounded Symmetric Domains in C , Contemporary Mathematics Book Series 321, 181 -195.

Miao, J. (2001). Hankel Type Operators on the Unit Disk, Studia Mathematica 146, 55 – 68.

Miao, J. (1998). Reproducing Kernels for Harmonic Bergman Spaces of the Unit. Monatshefte fur Mathematik. 125, 25-35.

Miao, J. (1997). Toeplitz Operators with Bounded Radial Symbols on the Bergman Space of the Unit Ball, Acta Scientiarum Mathematicarum (Szeged) 63, 639–645.

Miao, J. (1997). Toeplitz Operators on Harmonic Bergman Spaces, Integral Equations and Operator Theory 27, 426–438.

Miao, J. (1993). A Characterization of the Functions with Nonnegative Taylor Series Coefficients in BMOA space (in Chinese), Journal of Hangzhou University 20, 14–19.

Miao, J. (1992). Characterizations for Analytic Functions of Bounded Mean Oscillation, Bulletin of the Australian Mathematical Society 46, 115–125.

Miao, J. (1992). A Property of Analytic Functions with Hadamard Gaps, Bulletin of the Australian Mathematical Society 45, 105–112.

Miao, J. (1992). A Characterization of the Space BMOA (in Chinese), Journal of Hangzhou University, 19, 26–33.

Miao, J. (1992). The Cesaro Operator Is Bounded on H for 0 < p < 1, Proceedings of the American Mathematical Society, 1077–1079.

Miao, J. (1991). Carleson Measures and Related Inequalities (in Chinese), Journal of Hangzhou University 18, 151-158.

#### **Presentations**

Miao, J. (2012). Hankel Operators on the Harmonic Bergman Space of the Unit Ball. Chongging Analysis Meeting III, June 3, Chongging, China.

Miao, J. (2012). Hankel Operators on the Harmonic Bergman Space of the Unit Ball. Seminar, Department of Mathematics, Huzhou University, June 20, Huzhou, China.

Miao, J. (2012). Toeplitz Operators on the Bergman Space of the Unit Disk. Seminar, College of Mathematics and Statistics, Chongqing Technology and Business University, June 6, Chongqing, China.

Miao, J., Stitts, J. (2011). Residues and Real Variable Integration III. A Symposium of Research & Scholarship, March 29, Arkansas State University, AR.

Miao, J., Stitts, J. (2011). Residues and Real Variable Integration III. Arkansas State University MAA Seminar Series, AR.

Miao, J., Stitts, J. (2011). Residues and Real Variable Integration III. Oklahoma-Arkansas MAA Meeting, March 29, Central Oklahoma University, OK.

Kaplan, O., Miao, J. (2011). Stone-Weierstrass Approximation Theory. A Symposium of Research & Scholarship, March 29, Arkansas State University, AR.

Miao, J., Stitts, J. (2010). Residues and Real Variable Integration. Oklahoma-Arkansas MAA Meeting, March 27, John Brown University, AR

Miao, J., Stitts, J. (2010). Residues and Real Variable Integration II. Arkansas State University MAA Seminar Series, September 28, AR.

Miao, J. (2009). Bounded Toeplitz Products. Analysis Seminar, Huzhou University, June 12, Huzhou, China.

Miao, J. (2008). Bounded Toeplitz Products on the Weighted Bergman Space of the Unit Ball. The 24th Southeastern Analysis Meeting & the 23rd Shankes Lectures, March 8, Vanderbilt University, Nashville, TN.

Miao, J. (2007). Operators on the Harmonic Bergman Space of a Bounded Domain. The 23th Southeast Analysis Meeting, March 11, University of Richmond, VA.

Miao, J. (2006). Complex Numbers and Distribution of Prime Numbers. Arkansas State University MAA Seminar Series, March 1, AR.

Miao, J. (2005). Complex Numbers and Distribution of Prime Numbers. Arkansas State University MAA Seminar Series, Spring, AR.

Miao, J. (2004). Toeplitz Operator with radial symbols on the harmonic Bergman space of the unit ball, the 20th Southeastern Analysis Meeting, March 27, University of Alabama, Tuscaloosa, AL.

Miao, J. (2002). Trace Ideal Criteria for Hankel Operators on the Harmonic Bergman Space of the Unit Bal, the 18th Southeastern Analysis Meeting, University of North Carolina Chapel Hill, March 16, NC.

Miao. J. (2001). On the Boundedness and Compactness of Commutators, Trends in Banach Spaces and Operator Theory, University of Memphis, October 6, TN.

Miao. J. (2001), Commutators on Half - Spaces (as Invited Speaker), Celebrating 100th Birthday of Buqing Su and International Mathematics Conference, Zhejiang University, July 31, China.

Miao. J. (2001) Commutators on the Unit Ball, Annual Joint Mathematics Meeting of the American Mathematical Society and the Mathematical Association of America, New Orleans, Louisiana, January 10, LA.

Miao J. (2000). Hankel Type Operators on the Upper Half - Space (as Invited Speaker for Special Sessions), 960th American Mathematical Society Regional Meeting, University of Alabama - Birmingham, November 11, AL.

Miao J. (2000). Hankel Type Operators on the Upper Half - Space, Marvin Rosenblum Day and 16th Southeastern Analysis Meeting, University of Virginia, March 18, VA.

Miao J. (1999), On Hankel - Type Operators, 15th Southeastern Analysis Meeting and Shanks Lecture Vanderbilt University, May 21, TN.

Miao J. (1997). Hankel Operators (as Invited Speaker), Department of Mathematics and Statistics, University of Maine - Orono, June MA

#### **Honors and Awards**

Summer Institute for Research Development Fellow, Arkansas State University 2013

NSF travel grant 2008

Dean's Research Award 1999-2001

Graduate Assistant Teaching Award (department-level award); Department of Mathematical, Michigan State University 1997

# **Institutional Committees**

## University

Faculty Senate (University) Fall 2002 - Spring 2008

Department Curriculum Committee (University) Fall 2003 - Fall 2005

Department Curriculum Committee (University) Fall 2003 - Present

College Undergraduate Curriculum and Policy Committee (University) Fall 2004 - Present

Department Promotion, Retention and Tenure Committee (University) Fall 2004 - Present

Department Promotion, Retention and Tenure Committee (University) Fall 2005 - Fall 2011

College PRT Committee (University) Fall 2005 - Present

Graduate Council (University) Fall 2006 - Summer 2012

Department Graduate Program Committee (University) Fall 2006 - Present

Department Library Committee (University) Fall 2006 - Fall 2011

Department Library Committee (University) Fall 2006 - Present

Graduate Council (University) Fall 2006 - Fall 2011

Deparment Awards Committee (University) Fall 2006 - Present

Department Assessment Committee (University) Fall 2006 - Present

Department Curriculum Committee (University) Fall 2006 - Fall 2011

Department Scholarship Committee (University) Fall 2006 - Present

Department Strategic Planning Committee (University) Fall 2006 - Fall 2011

Department Strategic Planning Committee (University) Fall 2006 - Present

Student Group Advisor (list group) (University) Fall 2010 - Fall 2012

Aspirational Peer Committee (University) Fall 2011

Aspirational Peer Committee (University) Fall 2011 - Spring 2012

### Other Institutional Service

(Task Force Member) Task Force on Research & Teaching Balance (University) Summer 2012 - Fall 2011

Acting Department Chair (University) Summer 2012

(Committee Member) College Centennial Committee (University) Summer 2012 - Fall 2011

(Committee Member) College Curriculum Committee (University) Summer 2012 - Fall 2011

(Faculty Mentor) New Faculty Teaching (University) Summer 2012 - Fall 2011

(Committee Member) PRT Committee of Department of Computer Science (University) Summer 2012 - Fall 2011

(Committee Member) Teacher Education Screening Committee (University) Summer 2012 - Fall 2011

(University Senate Service) ASU Faculty Senate (University) Summer 2012 - Summer 2008

(Committee Chair) Mathematics Search Committee (University) Summer 2012 - Fall 2011

Math Education Faculty Search Committee (University) Fall 2010 - Spring 2011

Math and Statistics Faculty Search Committee (University) Fall 2009 - Spring 2010

College Dean Search Committee (University) Spring 2009 - Fall 2009

Math and Statistics Faculty Search Committee (University) Fall 2008 - Spring 2009

Task Force on Research & Teaching Balance (University) Fall 2008

Math Faculty Search Committee (University) Fall 2007 - Spring 2008

## **Professional Service**

Reviewer, Journal Article, Journal of Mathematical Analysis and Applications, 2007 - Present

Reviewer, Mathematical Reviews, 2000 - Present

Peer Reviewer for International Mathematics Journals

# **Teaching**

## Fall 2006 Courses:

MATH 2204 003 - Calculus I

MATH 2204 004 - Calculus I

MATH 6823 1 - FUNCTIONS OF A REAL VARIABLE I

## **Spring 2007 Courses:**

MATH 2204 001 - Calculus I

MATH 2204 004 - Calculus I

MATH 6833 1 - FUNCTIONS OF REAL VARIABLE II

MATH 689V 1 - THESIS MOBIUS TRANSF ON CIRCLE

MATH 689V 2 - THESIS HEN STOCK MAC SHANE INT

### **Summer 2007 Courses:**

MATH 3243 001 - Linear Algebra

MATH 6653 1 - THEORY OF NUMBERS

#### Fall 2007 Courses:

MATH 2204 002 - Calculus I

MATH 2204 004 - Calculus I

MATH 4553 001 - Advanced Calculus I

MATH 5553 1 - ADVANCED CALCULUS I

MATH 6853 1 - FUNCTIONS COMPLEX VARIABLE I

## **Spring 2008 Courses:**

MATH 2204 002 - Calculus I

MATH 4563 001 - Advanced Calculus II

MATH 5563 1 - ADVANCED CALCULUS II

MATH 6863 1 - FUNCTIONS COMPLEX VARIABLE II

## **Summer 2008 Courses:**

MATH 3243 001 - Linear Algebra

MATH 6643 1 - ADVANCED LINEAR ALGEBRA

## Fall 2008 Courses:

MATH 2204 002 - Calculus I

MATH 2204 004 - Calculus I

MATH 4553 001 - Advanced Calculus I

MATH 4553 002 - Advanced Calculus I

MATH 5553 1 - ADVANCED CALCULUS I

MATH 6823 1 - FUNCTIONS OF A REAL VARIABLE I

MATH 689V 1 - THESIS

## **Spring 2009 Courses:**

MATH 3243 001 - Linear Algebra

MATH 5563 1 - ADVANCED CALCULUS II

MATH 680V 1 - INDST FUNC OF ONE COMPLEX VARI

MATH 6833 1 - FUNCTIONS OF REAL VARIABLE II

MATH 689V 1 - THESIS

## **Summer 2009 Courses:**

MATH 3243 001 - Linear Algebra

MATH 6653 1 - THEORY OF NUMBERS

#### Fall 2009 Courses:

MATH 2204 002 - Calculus I

MATH 2204 005 - Calculus I

MATH 4553 001 - Advanced Calculus I

MATH 5553 1 - ADVANCED CALCULUS I

MATH 6853 1 - FUNCTIONS COMPLEX VARIABLE I

## **Spring 2010 Courses:**

MATH 2204 001 - Calculus I

MATH 2204 004 - Calculus I

MATH 4563 001 - Advanced Calculus II

MATH 5563 1 - ADVANCED CALCULUS II

MATH 6863 1 - FUNCTIONS COMPLEX VARIABLE II

#### **Summer 2010 Courses:**

MATH 3243 001 - Linear Algebra

MATH 6643 1 - ADVANCED LINEAR ALGEBRA

#### Fall 2010 Courses:

MATH 2204 003 - Calculus I

MATH 4553 001 - Advanced Calculus I

MATH 5553 1 - ADVANCED CALCULUS I

MATH 6823 1 - FUNCTIONS OF A REAL VARIABLE I

MATH 689V 1 - STONE-WEIERSTRASS THEROEM

#### **Spring 2011 Courses:**

MATH 2204 002 - Calculus I

MATH 2204 005 - Calculus I

MATH 3243 001 - Linear Algebra

MATH 6833 1 - FUNCTIONS OF REAL VARIABLE II

MATH 689V 2 - THESIS STONE WEIERSTRASS THEOR

### **Summer 2011 Courses:**

MATH 3243 001 - Linear Algebra

MATH 4553 001 - Advanced Calculus I

MATH 5553 1 - ADVANCED CALCULUS I

MATH 6653 1 - THEORY OF NUMBERS

### Fall 2011 Courses:

MATH 2204 001 - Calculus I

MATH 2204 002 - Calculus I

MATH 6853 1 - FUNCTIONS COMPLEX VARIABLE I

## **Spring 2012 Courses:**

MATH 2214 002 - Calculus II

MATH 2214 H04 - HNRS CALCULUS II

#### MATH 6863 1 - FUNCTIONS COMPLEX VARIABLE II

## **Summer 2012 Courses:**

MATH 3243 001 - Linear Algebra

MATH 6643 1 - ADVANCED LINEAR ALGEBRA

## Fall 2012 Courses:

MATH 2204 002 - CALCULUS I

MATH 4553 001 - ADVANCED CALCULUS I

MATH 4553 H01 - HNRS ADVANCED CALCULUS I

MATH 5553 001 - ADVANCED CALCULUS I

MATH 6823 001 - FUNCTIONS OF A REAL VARIABLE I