

# CURRICULUM VITAE

**Damon M. Hay**

September 15, 2017

**Address:**

Sam Houston State University  
Department of Mathematics & Statistics  
Lee Drain Building  
Box 2206  
Huntsville, Texas 77341

Phone: (936) 294-3662  
Fax: (936) 294-1882  
Email: dhay@shsu.edu

**Education:**

Ph.D. Mathematics, University of Houston, 2006.

Advisor: Dr. David P. Blecher.

Dissertation: *Noncommutative Topology and Peak Interpolation for Operator Algebras.*

M.S. Mathematics, University of Houston, 2004.

B.S. Mathematics, University of Texas, 1996.

**Field of Research:** Functional analysis, operator spaces, and operator algebras.

**Professional Experience:**

Associate Professor, August 2014 - present, Sam Houston State University.

Assistant Professor, August 2011 - July 2014, Sam Houston State University.

Visiting Assistant Professor, August 2010 - July 2011, Sam Houston State University.

Assistant Professor, August 2006 - July 2011, University of North Florida.

Lecturer, August 2005 - May 2006, University of Houston.

Teaching Fellow, August 2000 - May 2005, University of Houston.

Secondary Mathematics Teacher, August 1997 - May 2000, Lanier Middle School, Houston, TX.

**Publications:**

*Non-stable K-theory for Leavitt path algebras*, (with M. Loving, M. Montgomery, E. Ruiz, and K. Todd), to appear, Rocky Mountain J. Math., 44:6 (2014), 1817 - 1850.

*Multipliers and hereditary subalgebras of operator algebras*, Studia Mathematica, 205:1 (2011), 31-40.

*Non-commutative partial matrix convexity*, (with J.W. Helton, A. Lim, and S. McCullough), Indiana University Mathematics Journal, 57:6 (2008), Special Issue, 2815-2842.

*Hereditary subalgebras of operator algebras*, (with D. Blecher and M. Neal), Journal of Operator Theory, 59:2 (2008), 333-357.

*Closed projections and peak interpolation for operator algebras*, Integral Equations and Operator Theory, 57 (2007), 491-512.

*Complete isometries - an illustration of noncommutative functional analysis*, (with D. Blecher) Proceedings of 4th Conference on Function Spaces, Contemp. Math., AMS (2003).

*Complete isometries into  $C^*$ -Algebras*, (with D. Blecher) Preprint (2002), Math.OA/0203182.

## Mathematical Talks:

*Noncommutative Analysis*, Colloquium, Sam Houston State University, Nov. 13, 2013.

*Multipliers and hereditary subalgebras of operator algebras*, Analysis Seminar, Texas A&M University, April 13, 2012.

*Multipliers and hereditary subalgebras of operator algebras*, Analysis Seminar, University of Houston, Sept. 26, 2011.

*Multipliers and hereditary subalgebras of operator algebras*, Greater Plains Operator Theory Symposium, June, 2011.

*Multipliers and hereditary subalgebras of operator algebras*, AMS Contributed Paper Session - Operator Theory, January 9, 2011.

*The Stone-Ćech compactification and operator algebras*, Colloquium, Sam Houston State University, Nov. 3, 2010. Jan. 22, 2007.

*Noncommutative peak phenomena*, Seminar in operator theory and operator algebras, University of Virginia, Nov. 11, 2008.

*Noncommutative polynomials and convexity I, II and III*, Seminar, University of North Florida, Oct. 5, 12 and 19, 2007.

*Matrix Convexity I and II*, Analysis Seminar, University of Florida, Feb. 6 and 20, 2007.

*An ideal situation: closed sets, approximate identities, and operator algebras*, Colloquium, University of Florida, Jan. 22, 2007.

*Urysohn's lemma, ideals, and peak interpolation for operator algebras*, Southeastern Analysis Meeting, University of Florida, Spring 2006.

*Noncommutative topology*, Analysis Seminar, University of Houston, Nov. 11, 2005.

*Noncommutative peak sets and Glicksberg's theorem*, Workshop in Linear Analysis and Probability, Texas A&M University, July 28, 2005.

*A noncommutative Banach-Stone theorem*, Graduate Seminar, University of Houston, March 28, 2003.

#### **Graduate Work Directed:**

Petero Kwizera, M.S., August 2010, Thesis: *Matrix Singular Value Decomposition*, University of North Florida.

T. Ryan Johnson, M.S., 2014, Thesis: *The Mathematics of Optimal Commodity Taxation*, Sam Houston State University.

#### **Service:**

SHSU Colloquium organizer, Fall 2016 - Present.

Fall 2015-Present, Faculty Advisor, AMS Student Chapter at SHSU.

Fall 2015-Present, Faculty Advisor, SHSU eSports.

Fall 2014-Spring 2015, departmental committee member, Search Committee.

Spring 2015, Ph.D. thesis committee member for Tristan Whalen (Advisor: Mark Tomforde), University of Houston.

Fall 2014 - Spring 2015, departmental committee member, Mathematics Search Committee

Spring 2014, departmental committee member, FES Committee

Fall 2013, Colloquium co-organizer.

Spring 2013, Ph.D. thesis committee member for Maureen Royce (Advisor: David Blecher), University of Houston.

2011-Present, departmental committee member, Graduate Committee.

2011-Present, departmental committee member, Curriculum Committee.

Spring 2012, departmental committee member, Textbook Committee for Calculus sequence, Spring 2012.

2011-2012, departmental committee member, Search Committee.

Spring 2011, departmental committee member, Textbook Committee for MATH 1332.

2009-2010, departmental committee member, Statistics Search Committee, University of North Florida.

2008-2010, departmental committee chairperson, General Education Committee, University of North Florida.

2007-2010, departmental committee member, Graduate Committee, University of North Florida.

2007-2009, university committee member, Honors Council, University of North Florida.

2007-2008, departmental committee member, Mathematics Search Committee, University of North Florida.

2006-2008, departmental committee member, General Education Committee, University of North Florida.

2006-2007, departmental committee member, Travel Policy Committee, University of North Florida.

Fall 2004, organizer of Graduate Student Seminar, University of Houston.

**Community:**

Fall 2013, Advisor for 'Spatial Math' education program, Texas Seaport Museum, Galveston, Texas.

Spring 2008, Co-coordinator and instructor for a series of workshops for elementary teachers of the Diocese of St. Augustine.

Summer 2005, *G.E. Summer Math Program* instructor (coordinated by the University of Houston Mathematics Department and select Houston area public schools).

**Professional Certifications:**

Passing candidate - Society of Actuaries/Casualty Actuarial Society Exam P/1 (Probability), January 2010.

State of Texas Secondary Mathematics Teacher Certification, May 1998.

**Additional Training:**

2001 IMA PI Summer Program for Graduate Students on *Poisson and Quantum Structures*, University of Cincinnati, June 18-July 13, 2001.

*Clay Mathematics Institute Spring School on Noncommutative Geometry*, Vanderbilt University, May 2003.

**Languages:**

English (native).

Spanish (limited working proficiency).

**Professional Memberships:**

American Mathematical Society.