Curriculum Vitae: Dr. John D. Williams, Ph.D.

Universität des Saarlandes
Fachrichtung Mathematik
Postfach 151150, 66041 Saarbrücken
williams@math.uni-sb.de
Phone: +(49) 177-564-4276
http://www.math.uni-sb.de/ag/speicher/williams.html

Personal Data:

Born:	July 21, 1983. Illinois, USA.
Citizenship:	USA
Marital Status:	Single
Languages:	English (native), German (fair/good, I am one year away from speaking at the classroom level), French (written).

Areas of Expertise:

Analysis, Free Probability, Operator Theory, Operator Algebras, Combinatorics.

Employment.

October 2014 – Present:	Humboldt Research Fellow, Universität des Saarlandes.
August 2011 – August 2014:	Visiting Assistant Professor, Texas A&M University.
September 2006 – May 2011:	Associate Instructor, Indiana University.

Education.

October 2014-Present:	German Language Courses, Universität des Saarlandes.
August 2014 – September 2014:	Intensive German Language Course, DID Institut Frankfurt.
September 2006 – August 2011:	Ph.D Program in Mathematics, Indiana University. Thesis Adviser: Hari Bercovici
August 2002 – May 2006:	B.S. Program in Mathematics, University of Illinois, Chicago.

Grants and Fellowships.

2014-2016:	Humboldt Research Fellowship for Postdoctoral Researchers.
2013-2015:	AMS-Simons Travel Grant

Accepted Publications.

Analytic Function Theory for Operator-Valued Free Probability.
Accepted for Publication, Crelle's Journal.
http://arxiv.org/abs/1309.0877

Quantum Symmetric States on Free Product C*-Algebras.
Joint with Ken Dykema and Claus Koestler.
Accepted for Publication. Transactions of the AMS.
http://arxiv.org/abs/1305.7293

Limit theorems for monotonic convolution and the Chernoff product formula.
Joint with Michael Anshelevich.
International Mathematics Research Notices, IMRN (2014), no. 11, 2990–3021. MR 3214313
http://arxiv.org/abs/1209.4260

A Hincin Type Characterization of Infinite Divisibility for Operator Valued Free Probability.
Journal of Functional Analysis, 2014, Vol. 267(1), pp. 1-14.
http://arxiv.org/abs/1110.2691

A Khintchine Decomposition for Free Probability.
Annals of Probability. Volume 50(5), 2012, 2236—2263.
http://arxiv.org/abs/1009.4955

Uniform Convergence and the Free Central Limit Theorem.
Complex Analysis and Operator Theory. (23 July 2010), pp. 1-9-9.
http://arxiv.org/abs/1104.1604

Submitted Papers.

B-Valued Free Convolution for Unbounded Operators.
http://arxiv.org/abs/1507.02580

Operator-Valued Jacobi Parameters and Examples of Operator-Valued Distributions.
Joint with Michael Anshelevich.
http://arxiv.org/abs/1412.1280

Operator-Valued Monotone Convolution Semigroups.
Joint with Michael Anshelevich.
http://arxiv.org/abs/1412.1413

Conferences Organized.

October 2015:	AMS Special Session in Recent Advances in Non-Commutative Analysis, Loyola University, Chicago.
March 2015:	Workshop in Non-Commutative Analysis and Stochastic Processes, Universität des Saarlandes, Saarbrücken, Germany.
July 2014:	Focus Session in Free Probability, Texas A&M, College Station, Texas.

Forthcoming Talks.

2016

- *AMS Special Session in Advances in Free Analysis*, Seattle, Washington, January (extended talk in two time slots).

2015

- *Analysis Seminar*, University College Cork, October.
- *Analysis Seminar,* Universität des Saarlandes, October.
- *Linear Analysis Seminar*, Texas A&M, College Station Texas, October.
- *AMS Special Session in Recent Advances in Non-Commutative Analysis*, Loyola University Chicago, October.

Past Talks.

2015

- *Analysis Seminar*, TU Graz, Austria, July.
- *Free Probability Theory*, Mathematisches Forschunginstitut Oberwolfach, June.
- *Algebraic and Analytic Aspects of Quantum Levy Processes*, Alfried Krupp Wissenschaftskolleg, Greifswald, Germany, March.
- *Workshop in Non-Commutative Analysis and Stochastic Processes*, Saarland, March.

2014

- *Analysis Seminar,* Universität des Saarlandes, October.
- *Free Probability and Random Matrices*, Universität Bielefeld, Germany, September.
- *IWOTA 2014*, VU University Amsterdam, July.
- *Free Probability and Large N 2014*, UC Berkeley, March.
- *AMS Section Meeting, Knoxville, Session in Free Probability and Operator Algebras*, March.

- A*MS National Meeting, Baltimore, Sessions in Free Probability and Operator Algebras*, January.

2013

- *SUMIRFAS 2013*, Texas A&M, August.
- *Focus Program on Non-Commutative Distributions in Free Probability Theory*, Fields Institute, July.
- *GPOTS 2013*, UC Berkeley, June.
- *Free Probability Satellite Conference, AMS National Meeting*, San Diego. January.

2012

- *Free Probability and Large N Limit Conference*, UC Berkeley, March.
- *Analysis Seminar*, Universität des Saarlandes, Saarbrücken, Germany, July.
- *24th International Conference on Operator Theory,* Timisoara, Romania, July.
- *COSY 2012*, Queen's University, Kingston, May.
- *Linear Analysis Seminar*, Texas A&M University, October.
- *Probabilistic Operator Algebra Seminar*, UC Berkeley, November.

2011

- *Linear Analysis Seminar,* Texas A&M University, October.
- *Analysis Seminar*, University of Houston, October.
- *ESI Program "Bialgebras in Free Probability"*, Schroedinger Institute, Vienna, April.
- *Analysis Seminar*, University of Waterloo, February.

2010

- *Operator Algebras Seminar*, University of Copenhagen, December.
- *Subfactor Seminar*, Vanderbilt University, December.
- *Probabilistic Operator Algebra Seminar*, UC Berkeley, November.
- *Workshop on the Baum-Connes Conjecture*, IUB, August (expository).

Teaching.

Texas A&M:

- M251, Engineering Mathematics III, 2011-2013 (6 courses, Equivalent to Calculus III).
- M151, Engineering Mathematics I, Spring 2012. (Equivalent to Calculus I).
- M152, Engineering Mathematics II, Fall 2011. (Equivalent to Calculus II).

Indiana University:

- M118, Finite Mathematics, Spring 2011.
- M120, Brief Survey of Calculus II, Spring 2010.
- M025, Precalculus Mathematics, Spring 2009.
- M014, Basic Algebra, Fall 2008.
- J111, Intro to College Math I, Fall 2007 (2 courses).

Additional Professional Services.

Referee:

- Advances in Mathematics
- Houston Journal of Mathematics
- Journal of Mathematical Analysis and Applications.

Reviewer:

- MathSciNet.