

# GABRIEL H. TUCCI

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## Personal Information

- Born in Montevideo, Uruguay
- Italian and Uruguayan citizen
- Married to Maria Valentina Vega no dependents

## Education

- **Texas A&M University** — College Station, TX  
*PhD. in Mathematics* *August 2009*
  - Advisor: Ken Dykema
  - GPR: 4.0
- **Universidad de la República** — Montevideo, Uruguay  
*Electrical Engineer major in Telecommunications* *June 2003*
- **Universidad de la República** — Montevideo, Uruguay  
*Licenciatura in Mathematics* *August 2002*

## Publications and Preprints

- “The Bessis-Moussa-Villani conjecture for free random variables”, in preparation.
- “Limits laws for geometric means of free positive random variables”, preprint arXiv:0802.4226, submitted to Probability Theory and Related Fields, 2008.
- “Some quasinilpotent generators of the hyperfinite  $II_1$  factor”, accepted in Journal of Functional Analysis, 2007.
- “The free entropy dimension of some  $L^\infty[0, 1]$ -circular operators” with Ken Dykema, Internat. J. Math. 18, 613-631, 2007.
- Appendix in “Hyperinvariant subspaces for some B-circular operators”, Ken Dykema, Math. Ann. 333 485-523, 2005.
- “Analysis and Improvements to MATE algorithm”, Miguel Griot, Gabriel Tucci, Pablo Belzarena and Santiago Remersaro, IEEE International Performance, Computing and Communications Conference, 2004.

## Fellowships and other merits

- Winner of the L.F. Guseman Prize in Mathematics April 2008
- Participant in the Thematic Program on Operator Algebras at the Fields Institute, Toronto, Canada July-December 2007

- Good Neighbor Scholarship, Texas A&M University 2005-2006
- AUF Fellowship, Texas A&M University 2004-2005
- Regents Fellowship, Texas A&M University 2003-2004
- AUF Fellowship, Texas A&M University 2003-2004
- Member of the Jury at the XVIII Iberoamerican Mathematics Olympiads 2002
- Silver Medal at the IV Iberoamerican University Mathematics Olympiads 2001
- Trainer for the national team of Mathematical Olympiads, Uruguay 1999-2000

## Talks

- “Limits laws for geometric means of free positive random variables”, Free Probability seminar, Texas A&M University February 2008
- “Some quasinilpotent generators of the hyperfinite  $II_1$  factor”, Linear Analysis seminar, Texas A&M University December 2007
- “Sum and product of free random variables”, Tribute to Rafael Laguardia, Universidad de la República, Uruguay December 2006
- “Introduction to von Neumann algebras”, Graduate Student Seminar (GSO), Texas A&M University November 2006
- “The free entropy dimension of some  $L^\infty[0, 1]$ -circular operators”, Great Plains Operator Theory Symposium, University of Iowa May 2006
- “Free Entropy dimension and B-circular operators”, series of two talks at the Free Probability seminar, Texas A&M University October 2005

## Conferences and Workshops attended

- Thematic Program on Operator Algebras, Fields Institute, Toronto July-December 2007
- GPOTS, University of Nebraska May 2007
- ECOAS, Georgia Institute of Technology, Atlanta October 2006
- GPOTS, University of Iowa May 2006
- Operator Algebras and Applications, University of Southern Denmark April 2006
- Geometric and Probabilistic methods in group theory and Dynamical systems, Texas A&M University November 2005
- ECOAS (East Coast Operator algebras), University of Pennsylvania October 2005
- Mini-conference in honor to Carl Pearcy, Texas A&M University August 2005
- Mini-conference in honor to Haskel Rosenthal, Texas A&M University August 2005
- SUMIRFAS, Texas A&M University August 2005
- NCGOAS (Non commutative Geometry and Operator algebras), Vanderbilt University, Nashville May 2005
- ECOAS (East Coast Operator algebras), Naval Academy, Annapolis October 2004
- SUMIRFAS, Texas A&M University August 2004
- Concentration week in Free probability and  $L_p$  spaces, Texas A&M University August 2004

- GPOTS, Texas A&M University May 2004

## Experience

- **Department of Mathematics** — Texas A&M University 2004-present  
*Teaching assistant*
  - Math 407 Complex Analysis, Grader Spring 2008
  - Math 152 Engineering Mathematics II, Teaching Assistant Spring 2007
  - Math 617 Graduate course in complex analysis, Grader Fall 2006
  - Math 142 Business Mathematics II, Instructor of record Summer 2006
  - Math 151 Engineering Mathematics II, Teaching Assistant Spring 2006
  - Math 151 Engineering Mathematics I, Teaching Assistant Fall 2005
  - Math 608 Graduate course in real analysis II, Grader Spring 2005
  - Math 152 Engineering Mathematics I, Teaching Assistant Fall 2004
- **Department of Mathematics** —Universidad de la República, Uruguay 1999-2002  
*Teaching Assistant*
  - Calculus I, Teaching assistant Fall 2002
  - Mathematics II, Instructor of record Spring 2002
  - Mathematics I, Teaching assistant Fall 2001
  - Linear Algebra II, Teaching assistant Spring 2001
  - Calculus II, Teaching assistant Fall 2000
  - Mathematics I, Teaching assistant Spring 2000
  - Mathematics II, Instructor of record Fall 1999
- **Department of Electrical Engineering** — Universidad de la República 2001-2002  
*Teaching Assistant*
  - Sampling and digital processing, Teaching assistant Fall 2002
  - Digital Filter Design workshop, Teaching assistant Spring 2002
  - Communication Systems, Teaching assistant Fall 2001
- **Graduate Courses in Electrical Engineering** — After finishing my Electrical Engineer degree I took two graduate courses in the Electrical Engineer department at Texas A&M University. These courses were Information Theory and Modulation Theory. In both courses apart from the regular homeworks and exams we did several simulations in Matlab. I have experience programming in Matlab and C. I also extensively programmed in Matlab when I was a TA of the Digital Filter Design workshop and the Sampling and Digital Processing class in the Universidad de la República, Uruguay.

## Computing

- Experience with Ubuntu, Suse Linux; Microsoft Windows; and a wide range of software on all these platforms.
- Experience programing in C, Java, Pascal, PARI, Matlab, Maple, LaTeX, HTML.

## Languages

- Spanish: mother tongue.
- English: fluent reading, writing and speaking.
- Italian and French: basic reading.

## Work authorization

- Eligible for Optional Training authorization.
- Italian and Uruguayan citizenship.
- F-1 Visa.