## CURRICULUM VITAE

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### Education.

- Ph.D., Mathematics, Graduate Center, CUNY, December 2004.
  Thesis Title: Mahler Formula for morphisms on ℙ<sup>n</sup>.
  Advisor: Professor Lucien Szpiro.
- M.Phil., Mathematics, Graduate Center, CUNY, October 2003.
- Lic., Mathematics, Havana University, July 1994.

### Positions held.

- Associate Professor, Department of Mathematics and Computer Science, Bronx Community College, September 2010 - Present.
- Assistant Professor, Department of Mathematics and Computer Science, Bronx Community College, September 2005 - September 2010.
- Substitute Lecturer of Mathematics, Bronx Community College, February 2004 August 2005
- Adjunct Lecturer of Mathematics, City College, July 2003 June 2004.
- Adjunct Lecturer of Mathematics, Queens College, July 2002 August 2002.
- Visiting Research Collaborator, Humboldt University of Berlin, September 1996 September 1997.

#### Publications and Work in Progress.

- Report on the essential minimum, http://fsw01.bcc.cuny.edu/jorge.pineiro/research.htm, (2017)
- Algebraic and geometric properties of face rings, available at the website http://fsw01.bcc.cuny.edu/jorg (2016).
- A presentation of the étale fundamental group, Impromptu Seminar, GC, available at webpage at http://fsw01.bcc.cuny.edu/jorge.pineiro/research.htm, (2012).

- Geometry of four-folds with a three non-commuting involutions, ICERM, Providence, available at NT archiv at *http://arxiv.org/abs/1303.4940*, (2012).
- Local canonical height associated to several morphisms, available at personal webpage http://fsw01.bcc.cuny.edu/jorge.pineiro/Localcannonical.pdf, (2011).
- A note on the projection of the diagonal subvariety, available at NT archiv at http://arxiv.org/abs/1303.4938, (2011).
- Canonical metric of commuting maps, Int. J. Mod. Math. Vol 4, 2009.
- Heights, algebraic dynamics and Berkovich analytic spaces, Sao Paulo Journal of Mathematical Sciences 3, 1 (2009), pp 77-94.
- Mahler formula on the projective n-space, (2006) Archiv http://arxiv.org/abs/math/0610737.
- (joint work with Szpiro L. and Tucker, T.) Mahler formula for dynamical systems and intersection theory on a singular arithmetic surface, Geometric methods in algebra and number theory, Progress in Mathematics 235, Birkhuser (2004) pp. 219-250.
- (joint work with Estrada J. and Reinaldo E) On the Jacobian Variety of Picard Curves: explicit law and algebraic structure. Math. Nach. Vol 208, 1999, pp 149-166.
- Appendix to Picard-Eisenstein metrics and class fields connected with the Apollonius circle. Preprint 99-16 Humboldt University of Berlin, 1999.
- (joint work with Estrada J. and Reinaldo E) A public key cryptosystem based on Picard codes, IVth symposium of Mathematics (Spanish), Inst. Cibern. Mat. Fis, pp 47-57. Havana 1997.

# Invited talks.

- Study Group of Number theory, GC. Dirichlet unit theorem on algebraic dynamics, October 2018.
- BEAG Seminar, GC. Canonical heights, October 2018.
- BCC Math meetings, Bronx Community College. Finiteness results in Arithmetic Geometry. September 2018.
- Study Group on Number theory, GC. Metrics on R-divisors, September 2017.
- Study Group on Number theory, GC. Essential minimum for height functions, April 2017.
- BCC Math meetings, Bronx Community College. Topological spaces from commutative algebra: Spec and Proj. August 2016.
- BCC Math meetings, Bronx Community College. Derived functors and geometric applications. November/October 2014.

- Conference on Diophantine Problems and Arithmetic Dynamics, Short Talk, Institute of Mathematics, Academia Sinica, Taiwan National University, June 2013.
- Mathematics Department at BCC, A presentation of the étale fundamental group, October 2012.
- ICERM semester program on Complex and Arithmetic Dynamics, Presentation in closing Event, ICERM, Providence, R.I., May 2012.
- Algebraic Geometry Seminar, Humboldt University of Berlin, April 2008.
- XXII Congreso Latinoamericanno de Algebra, Medellin, Colombia, July 2007.
- Joint New York Number Theory Seminar, Ph.D Reports, May 2005.

# Grants.

- PSCREG-Award 63702-00 41. Title: "Real line bundles and Algebraic dynamics". June 2010-June 2011.
- Focus Research Grant in Algebraic Dynamics, along with Prof. Lucien Szpiro of the Graduate Center and Prof. Clayton Petsche of Hunter College, CUNY. September 2010 - July 2012.
- PSCREG-Award 69333-0038. Title: "Mahler formula and integration on Berkovich spaces". June 2007-June 2008.
- PSC-CUNY Award 60029-3637. Title: "Consequence of the Mahler measure formula". June 2006-June 2007.
- Dean K. Harrison Fellowship. September 2001-June 2003.

#### Undergraduate Research Projects.

- Efrain Vargas; Minkowski inequality and other methods to proof simple-connectness of schemes, work in progress, (2013).
- Halid Idrissou; Rational Points and Computations on Varieties with Involutions, (2011).
- Ibrahima Diedhiou, Raya Bayor; Numerical exploration of Elliptic Curves with Complex Multiplication, (2009).
- Amilcar Mendez, Counting points on Elliptic Curves, (2007).
- Karl Moore, Alexander Smith; Binary linear codes and decoding by message passing, (2007).
- Erica Fells, Clyde Lewis, Oladipupo Ogunnubi, Manuel Torres; Pell's equation, Solutions of Linear Systems over  $F_p$  and points on Elliptic Curves mod p, (2006).