

Ivonne J. Ortiz

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Education

- Ph.D. Mathematics, SUNY Binghamton, May 2003.
Advisor: Thomas Farrell, dissertation
- M.S. Mathematics, SUNY Binghamton, May 1998.
- Diploma in Mathematics, Universidad de Antioquia, Colombia, May 1996.

Areas of Specialization

- Algebraic/Geometric Topology and K -theory.

Grants and Awards

- NSF Research Grant DMS-1441592 (SP) May 1, 20014 - April 30, 2015.
- NSF Research Grant DMS-1207712 (PI) 2012-2015.
- NSF Research Grant DMS-0805605 (PI) 2008-2011. No-cost extension 2011-2012.
- CFR Summer Grant (PI), Miami University, Summer 2008.
- College of Arts and Sciences Summer Research Grant (PI), Miami University, Summer 2004.
- Research Assistantship, SUNY Binghamton, Summer 2002, and Summer 2001.
- Research Assistantship, Universidad Nacional de Colombia, Medellin, 1995 and 1996.

Academic Positions

- Associate Professor, Miami University, Fall 2009 - present.
- Assistant Professor, Miami University, Fall 2003 - Spring 2009.
- Teaching Assistant, SUNY Binghamton, Fall 1996 - Spring 2003.

Dissertation

- *The lower algebraic K-theory of Γ_3* , May 2003. Advisor F. T. Farrell.

Papers

- D. Farley, I. J. Ortiz, *Algebraic K-theory of crystallographic groups - the three-dimensional splitting case*. Lecture Notes in Mathematics, Book 2113, Springer, 2014 Edition.
- J-F Lafont, I. J. Ortiz, R. Sánchez-García, *Rational equivariant K-homology of low dimensional groups*, Clay Math. Proceedings **16** (2012), pgs. 131-164. The volume is entitled *Topics in Non-commutative Geometry*, Proceedings of the 3rd Winter School at the Luis Santaló-CIMPA Research School, Buenos Aires, 2010.
- B. Magurn, J.-F. Lafont, I. J. Ortiz, *Lower Algebraic K-theory of hyperbolic reflection groups*. Math. Proc. Cambridge Philos. Soc. 148 (2010), pgs. 193-226.
- J.-F. Lafont, I. J. Ortiz, *Algebraic K-theory of hyperbolic 3-simplex reflection groups*, Comment. Math. Helv. 84 (2009), pgs. 297-337.
- J.-F. Lafont, I. J. Ortiz, *Splitting formulas for certain Waldhausen Nil-groups*. J. London Math. Soc. 79 (2009), pgs. 309-322.
- J.-F. Lafont, and I. J. Ortiz, *Relating the Farrell Nil-groups to the Waldhausen Nil-groups*, Forum Math **20** (2008), no. 3, 445–455.
- J.-F. Lafont, and I. J. Ortiz, *Relative hyperbolicity, classifying spaces, and lower algebraic K-theory*, Topology **46** (2007), pgs 527–553.
- I. J. Ortiz, *Erratum to the lower algebraic K-theory of Γ_3* , K-theory **38** (2007), pgs 85–86.
- I. J. Ortiz, *The lower algebraic K-theory of Γ_3* , K-theory **32**(4) (2004), pgs 331–355.

Papers in preparation

- D. Farley, and I. J. Ortiz, *The lower algebraic K-theory, L-theory, and topological K-theory of Hilbert Modular groups*. First draft of 14 pages completed.
- D. Farley, and I. J. Ortiz, *The lower algebraic K-theory of hyperbolic 4-simplex reflections groups*. In progress.

Invited Talks

- *Geometry and Topology session* at the First Mathematical Congress of the Americas, Guanajuato, Mexico, August 5-9, 2013.
- *Workshop on High-dimensional Topology in honor of Frank Connolly*. University of Notre Dame, December 8-9, 2012.
- Topology Seminar, SUNY Binghamton, November 29, 2012.
- Lecture on *Algebraic K-theory of infinite groups with torsion* at the Department of Mathematics, Universidad the Antioquia. July 2012.

- Geometry and Topology in Samos, Greece, June 11-16, 2012.
- Topology Seminar. The Ohio State University, April 26, 2012.
- *Geometry and Topology, Splitting formulas for certain Waldhausen Nil-groups*, Oaxaca, Mexico, April 6–10, 2009.
- *Topology Seminar, University of Chicago, Lower Algebraic K-Theory of Hyperbolic Reflections Groups*, April 23, 2009.
- Topology Seminar at the University of Aegen in Samos, Greece, *On the lower algebraic K-theory of Γ_4* , June 26, 2008.
- *Splitting formulas for certain Waldhausen Nil-groups. Conference on Algebraic and Geometric Topology*, in Gdańsk, Poland, June 9–13, 2008.
- *Splitting formulas for certain Waldhausen Nil-groups. AMS special session Algebraic K-theory and Nil-groups in algebra and topology* at the AMS sectional meeting in Indiana University, Bloomington IN, April 4–6, 2008.
- *On the Farrell and Jones Isomorphism Conjecture and its applications, G^3 , Geometric Groups on the Gulf coast* in Pensacola Beach FL, March 20–23, 2008.
- Topology Seminar, The Ohio State University, *On the lower algebraic K-theory of Γ_4* , February 24, 2008.
- *Lower algebraic K-theory of lattices in hyperbolic space, II*, Vanderbilt University, April 14–15, 2007.
- *On the lower algebraic K-theory of 3-dimensional crystallographic groups. Spring Topology and Dynamics Conference*, University of Missouri-Rolla, March 29–31, 2007.
- *The Farrell - Jones Isomorphism Conjecture as a tool for computations in K-theory*, Geometry, Topology, and their Interactions. An international conference in honor of Farrell-Jones, Morelia Mexico, January 8–13, 2007.
- Topology Seminar at SUNY Binghamton, *The lower algebraic K-theory of hyperbolic 3 simplex reflection groups*. May 10, 2006.
- Topology Seminar at Ohio State University, *Classifying spaces for relative hyperbolic groups*. February 28, 2006.
- *The lower algebraic K-theory of Γ_3* , JAMEX III (3rd Japan-Mexico Joint Meeting on Topology and its Applications), Oaxaca, Mexico, December 9, 2004; ALTENCOA Conference, Antioquia University, Medellin Colombia, July 2004;
- *The Isomorphism Conjecture in algebraic K-theory* (two hour short course), ALTENCOA Conference, Antioquia University, Medellin Colombia, July 2004.
- *The algebraic K-theory of Fuchsian groups*, Zassenhaus Group Theory Conference, Sarasota, FL, 2001.

Contributed Talks

- *The controlled algebraic K-theory of Γ_3* , Joint Mathematics Meeting AMS-MAA, Baltimore, 2003 and San Diego 2002, I also delivered this talk at the Topology Seminar in SUNY Binghamton on May 2002.

Conferences Attended

- Geometry and Topology session at the First Mathematical Congress of the Americas 2013, August 5-9, 2012, Guanajuato, Mexico.
- Workshop on High-dimensional Topology in honor of Frank Connolly. University of Notre Dame, December 8-9, 2012.
- The Summer School and Conference Topology and Groups - Berlin, June 18-29, 2012.
- Geometry and Topology in Samos, Greece, June 11-16, 2012.
- Geometry, Topology, Dynamics in Negative Curvature at Raman Research Institute, Bangalore India. August 2-7, 2010.
- Unni Namboodiri Lectures in Geometry and Topology at the University of Chicago, Chicago, IL., May 3-6, 2010
- Examples of Groups, Ohio State University, Columbus, OH, May 10-15, 2009.
- Geometry and Topology, Oaxaca, Mexico, April 6-10, 2009.
- Geometric Topology conference in honor of Steve Ferry at the University of Chicago, Chicago, IL, March 22-24, 2009.
- Andrew Ranicki's 60th Birthday Conference: Surgery and Manifold Theory, Münster, Germany, June 18-21, 2008.
- Conference on Algebraic and Geometric Topology, in Gdańsk, Poland, June 9-13, 2008.
- Summer School: *Cohomology of Groups and Algebraic K-theory*, CMS – Zhejiang University, Hangzhou China. July 1-13, 2007.
- Workshop on Nil Phenomena in Topology, Vanderbilt University, April 14th -15th, 2007.
- Spring Topology and Dynamics Conference, University of Missouri-Rolla, March 29th-31th, 2007.
- Geometry, Topology, and their Interactions. An international conference in honor of Farrell-Jones, Morelia (Mexico), January 8th-13th, 2007.
- Frank Quinn's 60th Birthday Conference, Binghamton, 5-7 November, 2006.
- Surgery Theory Past, Present and Future, A celebration of the 70th birthday of C.T.C. Wall ICMS, Edinburgh, 3-5 July, 2006.

- Prospects in Topology, Workshop in Münster, Germany, June 28 -29, 2006.
- Algebraic K -and L -Theory of Infinite Groups, ICMS, Edinburgh, United Kingdom, June 27 to July 1, 2005.
- Workshop in Geometric Topology, Colorado College at Colorado Springs, June 9 to 11, 2005.
- JAMEX III (3rd Japan-Mexico Joint Meeting on Topology and its Applications), Oaxaca, Mexico, December 9, 2004.
- ALTENCOA Conference – Algebra, Number Theory and Combinatorics, Antioquia University, Medellin, Colombia, July 2004.
- Great Lakes K -theory Conference, University of Illinois at Urbana-Champaign, May 2004.
- Topology Festival, Cornell University, Ithaca, NY, May 2002.
- MAA Seaway Section Meeting, SUNY Brockport, Brockport NY, April 2002
- Join Mathematics Meeting AMS-MAA, San Diego, CA, January 2002
- NExT/PFF (New Experiences in Teaching/Preparing Future Faculty) Workshop, SUNY Binghamton, Binghamton, NY, October 2001
- School on High-Dimensional Manifold Topology, Abdus Salam International Center for Theoretical Physics, Trieste, Italy, May2001.
- Topology Festival, Cornell University, Ithaca, NY, May 2001.
- MAA Spring Meeting, SUNY Binghamton, Binghamton, NY, April 2001
- Zassenhaus Group Theory Conference, New College of University of South Florida, Sarasota, NY, January 2001.
- Topology Festival, Cornell University, Ithaca, NY, May 2000.

Professional Service

I. Service to the Profession

- I am a co-organizer (with N. D. Broaddus, M. Davis, and J.-F. Lafont) of the conference *Topological Methods in Group Theory in honor of of Ross Geoghegan's 70th birthday*, The Ohio State University, Columbus, OH, June 16th-20th, 2014.
- I was the co-organizer (with D. Farley and J.-F. Lafont) of the Special Special *Interactions Between Geometry and Topology*, at the AMS Fall Central Sectional Meeting at University of Akron, October 20-21, 2012. Akron, OH.
- Served in a NSF Panel.
- Member of the Association for Women in Mathematics (AWM) Mentor Network. The net-work is intended to link mentors with a variety of groups: recent PhD's graduate students, undergraduates, high school and grade school students, and teachers.

- I was the co-organizer (with Ross Geoghegan and Kim Ruane) of a Special Session on *Geometric Group Theory/Geometric Topology* at the Spring Topology and Dynamics Conference at the University of Wisconsin at Milwaukee, March 13–15, 2008.
- I was the co-organizer (with J.-F. Lafont) of a Special Special Session in *Geometric Topology* for the American Mathematical Society Spring Sectional Meeting in Oxford, Ohio, March 2007.