

**ADRIAN IOVITA, Professor**  
Department of Mathematics and Statistics  
Concordia University  
Montreal

## EDUCATION

**Bucharest University**, Bucharest, Romania, B.S. in Mathematics, 1978.

**Boston University**, Boston Massachusetts, Ph.D. in Mathematics, May 1996

Adviser: Professor Glenn Stevens

Dissertation:  $p$ -Adic Cohomology of Abelian Varieties

## POSITIONS

**Professor**, Concordia University, Montreal, January 2003

**Assistant Professor**, University of Washington, September 1998- August 2003

**Postdoctoral Fellow**, CICMA (McGill University and Concordia University) Montreal, 1996-1998

## PUBLICATION LIST

*Articles published or submitted for publication*

- 1) **Sur les Anneaux Artiniens locaux de type fini de Représentation**, by A. Iovita – Bull. Math. de la Soc. Sci. Math. de Roumanie, Tome 32,(80), nr.2, 131-135,(1988)
- 2) **Completions of r.a.t.-valued fields of rational functions**, by A. Iovita and A. Zaharescu – J. of Number Theory, vol. 50-2, 202-206, (1995).
- 3) **Non-discrete local ramified class field theory**, by A. Iovita and A. Zaharescu, J. Math. Kyoto Univ., 35-2, 325-339, (1995).
- 4) **Galois Theory of  $B_{dR}^+$** , by A. Iovita and A. Zaharescu – Compositio Math., vol. 117, 1-31 (1999).
- 5) **Frobenius and Monodromy Operators for Curves and Abelian Varieties**, by R. Coleman and A. Iovita – Duke J. of Math., vol. 97-1, 171-217, (1999).
- 6) **Generating Elements for  $B_{dR}^+$**  by A. Iovita and A. Zaharescu – J. Math. Kyoto Univ., volume 39-2, 233-249, (1999)
- 7) **Formal Sections and de Rham Cohomology of Semistable Abelian Varieties**, by A. Iovita, Israel J. of Math., 120, 429-447,(2000).
- 8) **Logarithmic differential forms on  $p$ -adic symmetric spaces**, by A. Iovita and M. Spiess, Duke Math. Journal, vol 110, No 2, 253-278, (2001).
- 9) **Teitelbaum's Exceptional Zero Conjecture** by M. Bertolini, H. Darmon, A. Iovita, M. Spiess, AJM 124, 411-449, (2002).
- 10) **Derivatives of  $p$ -adic  $L$ -functions, Heegner cycles and monodromy modules attached to modular forms** by A. Iovita and M. Spiess, Invent. Math., 154, No 2, 333-384, (2003).
- 11)  **$p$ -adic height pairings on abelian varieties with semistable ordinary reduction** by A. Iovita and A. Werner, Journal für die reine und angewandte Mathematik, 564, 181-203, (2003).

- 12) **On Iwasawa theory of elliptic curves over  $\mathbb{Q}$  at primes of supersingular reduction over  $\mathbb{Z}_p$ -extensions of number fields**, by A. Iovita and R. Pollack, Journal für die reine und angewandte Mathematik, 598, 71-103, (2006).
- 13) **Anticyclotomic Main Conjecture for supersingular elliptic curves**, by H. Darmon, A. Iovita, J. Inst. Math. Jussieu 7 (2008), No 2, 291-325.
- 14) **Global applications of relative  $(\phi - \Gamma)$ -modules, I**, by F. Andreatta, A. Iovita, Asterisque 319, (2008), 339-420.
- 15) **Families of automorphic forms on definite quaternion algebras and Teitelbaum's conjecture**, by M. Bertolini, H. Darmon, A. Iovita, Asterisque 331, (2010), 29-64.
- 16) **Hidden structures on curves** by R. Coleman and A. Iovita, Asterisque 331, (2010), 179-233.
- 17) **Crystalline comparison isomorphisms for smooth formal schemes**, by F. Andreatta, A. Iovita, J. Inst. Math. Jussieu 12 (2013), no. 1, 77-151
- 18) **Semistable sheaves and comparison isomorphisms in the semistable case**, by F. Andreatta and A. Iovita, Rendiconti del Sem. Mat. della U. di Padova, vol. 128 (2012), 131-287.
- 19)  **$p$ -Adic Families of Siegel Modular Cuspforms**, by F. Andreatta, A. Iovita, V. Pilloni, accepted for publication in Annals of Math., (2013).
- 20) **On overconvergent modular sheaves for  $GL_2(\mathbb{F})$** , by F. Andreatta, A. Iovita, G. Stevens, accepted for publication in Israel J. of Math., (2013).
- 21) **An overconvergent Eichler-Shimura isomorphism**, by F. Andreatta, A. Iovita, G. Stevens, submitted, 2012.
- 22) **A  $p$ -adic non-abelian criterion for good reduction of curves**, by F. Andreatta, A. Iovita, M. Kim, preprint 2013, submitted.

*Preprints*

- 1) ***p*-Adic Families of Hilbert Modular Cuspforms**, by F. Andreatta, A. Iovita, V. Pilloni, preprint, 2013.
- 2) **On Iwasawa invariants of elliptic curves over  $\mathbb{Q}$  at primes of supersingular reduction** by R. Greenberg, A. Iovita, R. Pollack, preprint 2006.
- 3) **A cohomological construction of *p*-adic families of modular forms**, F. Andreatta, A. Iovita, G. Stevens, preprint 2010
- 4) **A geometric Jacquet-Langlands correspondence for *p*-adic families of modular forms via  $\ell$ -adic uniformization**, by M. Harris, A. Iovita, G. Stevens.

#### GRANTS AND AWARDS

- **The Ribemboin Prize** for excellence in research in Number Theory, the Canadian Number Theory Association, Waterloo, 2008.
- **Canada Research Chair Tier II** – 2008-2013.
- **Canada Research Chair Tier II** – 2003-2008.
- **NSERC research grant; *p*-adic families of Galois representations**– 2011-2016.
- **NSERC research grant; *p*-adic continuity of the Main Conjecture** – 2003-2011.
- **NSF grant: Galois Representations** – June 2000 - June 2003.
- **Junior Faculty Development Award** – University of Washington Award, 2001.

#### SERVICE

*Postdoctoral Fellows*

– 2003-present; I have advised or co-advised the following CICMA postdoctoral fellows: Payman Kassaei (now tenure position at Kings College, London, UK), Gil Alon (now postdoc at Weizmann Institute, Rehovot, Israel), Alexandru Ghitza (now tenure track position Colby College, Maine, USA), David Savitt (now tenure track position Texas University, USA), Yoshitaka Hachimori (now tenure position at Tokyo University, Tokyo), Adriano Marmora (now maitre de conference, Université Strasbourg), Bryden Cais (now tenure track position at Arizona State University), Jeehoon Park (now tenure track position at Postech University, Korea).

#### *Graduate Students*

– Radu Gaba, PhD Concordia University, graduated 2009, actually researcher at IRMAR, Bucharest.

– Marc Masdeu Sabate, PhD McGill University (co-advised with Henri Darrow), graduated in 2010, actually Postdoctoral Fellow Columbia University, New York.

– Rogelio Buendia Perez, PhD Concordia University, expected to graduate in 2013.

– Jyoti Prakash Saha, ALGANT PhD Concordia University-Orsay University, co-advised with Olivier Fouquet, started in 2011.

– Genaro Hernandez Mada, ALGANT PhD Padova University-Concordia University, co-advised with Bruno Chiarellotto, started 2012.

– Shan Gao, finished Master's degree at Concordia University 2012, started PhD degree with me at Concordia University, 2012.

#### *Committees*

– 2009-2011 member of the Grant Selection Committee for Pure Mathematics of NSERC.

– 2009 member of the PhD committee of Radu Gaba, Concordia University.

- 2008 member of the PhD committee of Gabriel Chenevier, McGill University, Montreal
- 2008 member of PhD committee of A. Vigni, University of Milano, Italy.
- 2007 member of PhD committee of H. Chapdelaine, McGill University, Montreal
- 2006 member of the PhD committee of R. Rúa Vargas, Concordia University, Montreal.
- 2005 member for the PhD committee of Stefano Vigni, University of Milano, Italy.
- 2005 member of the PhD committee of Marc-Hubert Nicole, McGill University, Montreal.
- 2004 member of the Habilitation committee of Elmar Grosse-Klöne, Münster University, Germany.
- referee for *Inventiones Mathematicae*, *Duke mathematical Journal*, *Compositio Mathematica Journal* and other mathematical journals.

CONFERENCES (after 2003.)

**International Conference on Automorphic Forms and Galois Representations**, Toronto, March 2012.

**AMS Meeting**, Boston, January 2012.

**International Conference on  $p$ -Adic Local Langlands Program**, organized by the Clay Mathematics Institute, Cordoba, Argentina, August 2011.

**International Conference on Automorphic Forms and Galois Representations**, IAS Princeton, March 2011.

**$p$ -Adic Semester**, Institut Henri Poincaré, Paris, January-March 2010

**Semester on Anabelian Geometry**, I. Newton Institute, Cambridge, UK, September 2009.

**Conference on  $p$ -Adic Modular Forms**, Roscoff, France, July 2009.

**Conference in Honour of Thomas Zink**, Bielefeld, Germany, June 2009.

**International conference on  $p$ -adic families of motives**, UCLA, Los Angeles, March 2008.

**Conference on  $p$ -adic representations**, Université Paris 13, Paris – May 2008.

**Conference on Abelian varieties**, Amsterdam – May, 2008.

**Conference on  $p$ -Adic representations**, Bordeaux – April, 2006

**AIM International conference**, Palo Alto, California, – February, 2006.

**International Conference of  $p$ -Adic Modular Forms**, Columbia University, New York – June 2005.

**l’Institute des Hautes Études Scientifiques**, Paris – February/June 2005.

**International Conference on Iwasawa theory**, Besancon, France – July 2004.

**$p$ -Adic variation of motives**, Banff, Canada – December 2003.

**The Birch and Swinnerton-Dyer conjecture conference**, Princeton, NJ – November 2003

**Current trends in arithmetic geometry and number theory**, Banff, Canada – August 2003

**International Conference on  $p$ -Adic Automorphic Forms**, Luminy, France, – June 2003.

#### TEACHING EXPERIENCE

**Università degli Studi, Padova** – as *Professor Straordinario* teaching

“Superficie di Riemann” and the ALGANT Master course “Number Theory II”. Started January 2007.

**Concordia University**, Montreal – as *Professor* teaching undergraduate and graduate courses, started January 2003. Taught a number of graduate courses on subjects like “Iwasawa theory”, “Commutative algebra” “Algebraic Geometry”, “Group Schemes”, “ $p$ -Adic Families of Modular Forms” and undergraduate courses like Math 208 and Math 205.

**University of Washington**, Seattle – as *Assistant Professor* teaching undergraduate courses, started September 1998. Taught “Multivariable calculus” and “Linear Algebra” in Fall 1998, “Calculus” in Spring 1999, Fall 1999, Spring 2000 and Winter 2001, Fall of 2001, Winter and Fall 2002.

**McGill University** and **Concordia University**, Montreal, Canada – as *Postdoctoral Fellow* teaching undergraduate courses, started September 1996. Taught “Differential Equations” at McGill University in Fall 1996, “Multivariable calculus” and “Differential Equations” at Concordia University in Spring and respectively Fall 1997. Taught a graduate course on “ $p$ -adic  $L$ -functions” at McGill University in Spring 1998.