Radu Gaba, Ph.D.

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EDUCATION

- Concordia University, Montréal, Canada, Ph.D. in Number theory, October 2009;
- Bucharest University, Bucharest, Romania, Diploma of Postuniversitary studies in Computer Science, February 2004;
- Bucharest University, Bucharest, Romania, M.Sc. in Complex Geometry and Computational Algebra, June 2003;
- Bucharest University, Bucharest, Romania, B.Sc. in Mathematics, June 2001;
- Saint Sava College, Bucharest, Romania, Diploma of secondary studies, June 1997.

POSITIONS

- 01 September 2010 present, **Teaching Assistant**, Department of Computer Science and Software Engineering, Concordia University, Montréal, Canada and **Research Assistant** at the Institute of Mathematics of the Romanian Academy, Bucharest, Romania;
- 01 November 2009 31 May 2010, **LTA Research Assistant Professor**, Mathematics & Statistics Department, Concordia University, Montréal, Canada and **Research Assistant** at the Institute of Mathematics of the Romanian Academy, Bucharest, Romania;
- 01 September 2004 30 September 2009, **Teaching** and **Research Assistant**, Mathematics & Statistics Department, Concordia University, Canada, and **Research Assistant** at the Institute of Mathematics of the Romanian Academy, Bucharest, Romania;
- 01 September 2003 31 August 2004, **Research Assistant** at the Institute of Mathematics of the Romanian Academy, Bucharest and **Assistant Professor** at the Polytechnic University, Bucharest, Romania;
- 01 September 2001 31 August 2003, **Mathematics Teacher** at the Goethe German College, Bucharest, Romania.

PUBLICATIONS AND PREPRINTS

1. On Fontaine Sheaves, PhD Thesis, October 2009, 100 pages, ISBN 9780494634325, available at URL:

http://www.radugaba.com/r.gaba thesis.pdf;

- 2. "Some computation problems arising in Fontaine Theory" (with B. Justus), Proceedings of the 16th International Conference in Applications of Computer Algebra, published in the Special Issue (Proc. of ACA'10 issue) of the Albanian Journal of Mathematics, Vol 4, No 4, December 2010, 213-221;
- 3. "Fontaine Sheaves in the ramified case", preprint.

AWARDS & GRANTS

- 1. 2006-2007, **International Tuition Fee Remission Award**, Concordia University, Montréal, Canada;
- 2. 2006, Campaign For a New Millennium, Concordia University, Montréal, Canada;
- 3. 2005, **Doctoral Teaching Assistantship Recipient**, Concordia University, Montréal, Canada;
- 4. 2003, **Third place** at the Annual Contest of the Institute of Mathematics of the Romanian Academy for Probationer Research Assistants, Bucharest;
- 5. April-May 2002, visitor, Humboldt University, Berlin, Germany;
- 6. October 2000 April 2001, Erasmus Grant, Friedrich Schiller University, Jena, Germany;
- 7. 1999-2003, **Gold Bursaries** for students who maintain an 95% overall average, Bucharest University, Romania;
- 8. March 1997, Silver Medal at the National Contest of Physics, Bucharest, Romania.

TEACHING

- Concordia University, Montréal, Canada as Teaching Assistant taught several times the undergraduate course MATH 208, Fundamental Mathematics (for more info, see URL: http://www.radugaba.com/). While Doctoral Teaching Assistantship recipient, also held seminars for MATH 208 (Fundamental Mathematics); also taught sections of Math 206 (Algebra & Functions) and Math 203 (Differential and Integral Calculus); grading lab-work and tutoring, Math Help Center, 9 semesters, 2004-2009. I currently give weekly tutorials for the courses COMP 232 (Discrete Mathematics for computer science students) and COMP 361 (Numerical Methods), Department of Computer Science, Concordia University.
- Politechnic University, Bucharest, Romania. Worked as Assistant Professor and taught undergraduate courses in Partial Differential Equations and Analysis, 2003-2004.
- Goethe German College, Bucharest, Romania. Worked as a *Mathematics Teacher* and *Computer Science Teacher* and taught Linear Algebra, Combinatorial Algebra, Calculus, Probability Theory, Introduction to Programming Techniques, Algorithms, Introduction to web site design, 2001-2003.

REPORTS & SEMINAR PRESENTATIONS (SELECTION)

- 1. "The modular group and the cohomology of certain congruence subgroups", Concordia University;
- 2. "The absolute and the Hasse invariants of elliptic function fields", Concordia University;
- 3. "Constructing Theta Functions", Concordia University.
- 4. "The absolute Galois Group of \mathbb{Q}_p ", Institute of Mathematics of the Romanian Academy.

TALKS (SELECTION)

- 1. "Witt vectors in Fontaine Theory", 03 Mar. 2010, ISM Seminar, Concordia University; (http://www.math.uqam.ca/ism/seminaires/hiver2010.html)
- 2. "p-adic Galois representations attached to Elliptic Curves", 15 Apr. 2009, ISM Seminar, McGill University;

(http://www.math.ugam.ca/ism/seminaires/hiver2009.html)

- 3. "Sites", 24 Sept. 2008, Graduate Student Seminar, McGill University;
- 4. "The Fontaine's rings B_{cris} , B_{st} , B_{dR} and the classification of Galois representations", 2 Feb. 2007, seminar on Crystalline representations and F-crystalls, Concordia University, organizers: A. Iovita & A. Marmora;
- 5. "Serre Duality for curves", 26 Mar. 2007, seminar on Elliptic curves/Modular Forms, Concordia University, organizer: A. Iovita;
- 6. "p-adic Banach spaces. Measures on \mathbb{Z}_p ", 17 and 24 Oct. 2004, p-adic Analysis seminar, Concordia University, organizers: A. Iovita & H. Darmon.

LANGUAGE AND TECHNICAL SKILLS

- Certificate in University and College Teaching, Concordia University, Fall 2010;
- Fluent in English, German and French spoken, written, and read;
- Borland Pascal, C++, HTML, Excel, Word, Maple, Pari;
- Analytic thinking, oriented on effective problem solving; algorithms;
- Working well in a team-oriented environment as well as individually.

REFERENCES

 Adrian Iovita, Professor, Canada Research Chair Department of Mathematics Concordia University Montréal, QC H3G 1M8, CANADA e-mail: iovita@mathstat.concordia.ca

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3. Hal Proppe, Professor
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4. Steven Henle, Assistant Professor Department of Applied Human Sciences Concordia University Montréal, QC H3G 1M8, CANADA e-mail: shenle@alcor.concordia.ca Phone: +1 514 848-2424 Ext.5607

5. Hershey Kisilevsky, Professor Department of Mathematics Concordia University Montréal, QC H3G 1M8, CANADA e-mail: kisilev@mathstat.concordia.ca Phone: +1 514 848-2424 Ext.3226