

Curriculum Vitae

Wiesława Nizioł

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Education

Warsaw University 1980-84; M.Sc. *summa cum laude*, Computer Science, 1984;
thesis: "Metody projektowania i specyfikacji algorytmów systolicznych",
thesis advisor: Wojciech Rytter.
Stanford University 1985-86; Ph.D. program, Computer Science.
Princeton University 1986-91; Ph.D., Mathematics, October 1991;
thesis: "On a cohomological functor associated to crystalline
representations", thesis advisor: Gerd Faltings.

Area of Specialization : Arithmetic Algebraic Geometry

Employment

Assistant Professor, Institute of Theory of Computations, Warsaw University, 1984-88.
Research and Teaching Assistant, Princeton University, Mathematics Department, 1987-1990.
L. E. Dickson Instructor, University of Chicago, 1992-96.
D. Jackson Assistant Professor, University of Minnesota, 1993-94 .
Assistant Professor, University of Utah, 1996-2000.
Associate Professor, University of Utah, 2000-.

Visiting Positions

Postdoctoral Fellow, Harvard University, 1991-92.
Max-Planck Institut für Mathematik, 1996-1997.
Henri Poincaré Institute, April 1997.
Strasbourg University, CNRS Fellowship, May-July 2002.
University of Muenster, June 2003.
Cambridge University, March 2004.
Tokyo University, June, 2004.

Honors

- Polish Computer Science Society Award for The Best Master Thesis in Computer Science, 1984,
"Metody projektowania i specyfikacji algorytmów systolicznych".
- A. Sloan Research Fellowship, 1998-2001.
- ICM 2006 Invited Lecture in Number Theory.

Grants

NSF grant: 1998-2001, 2001-2004, 2004-2007, 2007-2010.

Publications

- (1) *Cohomology of crystalline representations*, Duke Math. Journal **3** (1993), 747–791.
- (2) *On the image of p -adic regulator*, Inv. Math. **127** (1997), 375–400.

- (3) *Duality in the cohomology of crystalline local systems*, Comp. Math. **109** (1997), 67–97.
- (4) *Crystalline Conjecture via K-theory*, Ann. Scient. École Norm. Sup. **31** (1998), 659–681.
- (5) *Cohomology of crystalline smooth sheaves*, Comp. Math. **129** (2001), 123–147.
- (6) *Toric singularities: log-blow-ups and resolutions*, J. Algebraic Geom. **15** (2006), 1–29.
- (7) *p-adic motivic cohomology and arithmetic*, International Congress of Mathematicians. Vol. II, 459–472, Eur. Math. Soc., Zürich, 2006
- (8) *Semistable Conjecture via K-theory*, Duke Math. J. **141** (2008), no. 1, 151–178.
- (9) *On uniqueness of p-adic period morphisms*, Pure Appl. Math. Q. (issue dedicated to J.-P. Serre), to appear.
- (10) *K-theory of log-schemes, I*, Doc. Math., to appear.

Recent Talks

- 1997: Poincaré Institute, conference on p-adic geometry; Max-Planck Institut, Muenster, Strasburg, seminars.
- 1998: ICM 1998 satellite conference on Algebraic Geometry, Essen.
- 1999: CalTech, number theory seminar; Great Lakes K-theory Conference, V; CRM workshop on Arithmetic Geometry, Montreal.
- 2000: Toulouse, Algebraic K-theory and homotopy theory of schemes; Azumino, Japan, Algebraic Geometry 2000.
- 2002: Strasbourg, Number Theory seminar.
- 2003: University of Southern California, colloquium; University of Muenster, Number Theory seminar; University of Chicago, Algebraic Geometry seminar; BIRS, “p-adic variation of motives”.
- 2004: University of Arizona, Number Theory seminar; Cambridge University, Number Theory seminar; Nottingham University, Number Theory seminar; AMS meeting, USC, “Arithmetic Geometry and K-theory”; Tokyo University, Number Theory seminar; Kyoto University, Number Theory seminar; Research Symposium “L-functions and Galois Representations”, Univ. of Durham; AMS meeting, Northwestern University, “Applications of Motives”; AMS meeting, University of New Mexico, “Arithmetic Geometry”.
- 2005: Joint Columbia-CUNY-NYU Number Theory seminar; University of Florida, Arithmetic Geometry conference.
- 2006: Invited Lecture, Number Theory, ICM 2006, Madrid; AMS Meeting, Salt Lake City, “Number Theory”; BYU, colloquium.
- 2007: Joint Mathematics Meeting, New Orleans, “Arithmetic Geometry”; AMS meeting, Tucson, “Number Theory”.
- 2008: University of Chicago, Algebraic Geometry seminar; USC, Algebra seminar.

Professional Service

1999: co-organizer of a Special Session on Arithmetic Geometry for the AMS meeting at the University of Utah

2007: co-organizer of a Special Session on Arithmetic Geometry for the joint PTM-AMS meeting in Warsaw

NSF, member of three Proposal-Evaluation Panels

Refereeing: American Journal of Mathematics, Ann. Sci. École Norm. Sup., Astérisque, Bulletin de la Societe Mathématique de France, Compositio Mathematica, Expo. Math., Invent. Math., Journal Inst. Math. Jussieu, Journal of Number Theory, Manuscripta Mathematica.

Teaching

- (1) Graduate courses
 - Tate’s Thesis; Utah;

- Modular Forms; Utah;
 - K-theory; Utah;
 - Analysis of Algorithms; Warsaw;
 - Algorithmic Logic; Warsaw.
- (2) Undergraduate courses
- Calculus, Vector Calculus; Utah, Minnesota, Chicago;
 - Honor Calculus; Chicago;
 - Real Analysis; Utah, Chicago;
 - Abstract Algebra; Chicago;
 - Linear Algebra; Utah;
 - Basic Number Theory, Algebraic Number Theory; Utah;
 - Statistics; Utah;

Education and Mentoring

Fall 2001: supervisor of an REU student

2004-2005: weekly lectures in a study group on p -adic representations

summer 2006: weekly lectures in a study group on p -adic modular forms

2006-2007: organized a study group on p -adic modular forms

2007-2008: organized a study group on the proof of Serre's conjecture.