MILENA PABINIAK

WORK ADDRESS
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FIELD OF RESEARCH
Symplectic geometry and Hamiltonian group actions.

EDUCATION

2008 - 2012   PhD in Mathematics at Cornell University, advisor - prof Tara Holm,
Thesis: Hamiltonian Torus Actions in Equivariant Cohomology and Symplectic Topology,

2005 - 2008   George Washington University, Washington DC
Department of Mathematics, advisor prof. Jozef Przytycki,
(graduated with Masters Degree),

2000- 2005   The University of Lodz, Poland, Department of Mathematics
Specialization: Pure Mathematics, Degree: Magister
Title of Master Thesis: Application of the Stokes Theorem in complex analysis-
Cauchy's Theorem and Residue Theorem,
Master Thesis advisor - prof Antoni Pierzchalski,
Elite grant of Polish Minister of Education (year 2004/2005, Lodz, Poland),

1996 - 2000   XII High School, Lodz, Poland; (mathematical concentration);

WORK EXPERIENCE

2012 - now   Post-doctoral researcher at the University of Toronto;
2009 - 2012   Graduate Teaching Assistant at Cornell University, Ithaca NY:
Lecturer (Calculus I), Recitational TA (Linear Algebra),
Grader (Matrix Groups, Groups and Geometry, Linear Algebra),
2005- 2008   Graduate Teaching Assistant at the George Washington University, Washington DC:
Recitational TA for Calculus and Linear Algebra;

PUBLICATIONS AND PREPRINTS

1. "On the first group of the chromatic cohomology of graphs" with Prof. Jozef H. Przytycki and Radmila Sazdanovic, Geometriae Dedicata, Vol 140, No. 1 (2009)19-48, ISSN 0046-5755, math.GT/0607326

2. "Localization and Specialization for Hamiltonian Torus Actions", arXiv:1008.0900v1 [math.SG]

3. "Lower bounds for Gromov width of coadjoint orbits in U(n)", arXiv:1109.0943v1 [math.SG]

4. "Lower bounds for Gromov width in the SO(n) coadjoint orbits", arXiv:1201.0240v1 [math.SG]

INVITED TALKS

1. Foliations 2012, Lodz, Poland, June 29th 2012: "Lower bounds for Gromov width in the unitary and special orthogonal coadjoint orbits"

2. IAS Women and Mathematics Program, May 19th 2012; IAS, Princeton: "Lower bounds for Gromov width in the unitary and special orthogonal coadjoint orbits."

3. Toric Geometry Workshops in Oberwolfach, Germany, April 15-21, 2012, short talks session: "Lower bounds for Gromov width of coadjoint orbits of $U(n)$ and $SO(n)$. "

4. Joint Symplectic Seminar of Penn State & Cornell, University Park, PA, March 31st, 2012: "Lower bounds for Gromov width of coadjoint orbits of $U(n)$ and $SO(n)$. "

5. Geometry and Topology Seminar, MIT, March 5th, 2012: " Lower bounds for Gromov width of the unitary and special orthogonal coadjoint orbits. "

6. Geometry and Topology Seminar, McMaster University, February 23th, 2012: " Lower bounds for Gromov width of the unitary and special orthogonal coadjoint orbits. "

7. Symplectic Seminar, University of Toronto, February 22th, 2012: " Lower bounds for Gromov width of the unitary and special orthogonal coadjoint orbits. "

8. Geometry and Topology Seminar, University of Buffalo, January 20th, 2012: "Lower bounds for Gromov width of coadjoint orbits of $U(n)$ and $SO(n)$. "

9. Geometry Seminar, ETH Zurich, January 11th, 2012: "Lower bounds for Gromov width of coadjoint orbits of $U(n)$ and $SO(n)$. "

10. Joint Geometry and Differential Geometry Seminar, University of Illinois at Urbana Champaign, December 6th, 2011: "Lower bounds for Gromov width in the $SO(n)$ coadjoint orbits."

11. 2011 Fall Eastern Sectional Meeting, Cornell University, Ithaca, NY, September 10-11, 2011: "Lower bounds for Gromov width of coadjoint orbits in $U(n)$."

12. Symplectic Seminar, University of Toronto, July 22nd, 2011: "Finding the lower bounds for Gromov width of $U(n)$-coadjoint orbits."

13. Summer School on Contact and Symplectic Topology, University of Nantes, France, May 31st, 2011: "Lower bounds for Gromov width of coadjoint orbits of unitary group."

14. Cornell University Analysis Seminar, April 18th, 2011: "New proof of the Newlander-Nirenberg Theorem" (based on joint work with Prof. J. Hubbard);

15. MathFest, Pittsburgh, August 5-7, 2010, Session: Combinatorial Games and Schubert Calculus; title of the talk: Localization and specialization in equivariant cohomology

16. First Joint Meeting of American Mathematical Society and Polish Mathematical Society (PTM), Warsaw, Poland, July 31st-August 3rd 2007; title of talk:"Algebra structure in Kauffman Bracket Skein Module of twisted I-bundles" given at Special Session on Invariants of Links and 3-Manifolds;

17. Conference "Braids and Knots", Banach Center, Warsaw, Poland, December 11-15 2006; title of talk:"Khovanov-type homology of graphs motivated by Hochschild homology"

18. American Math Society Meeting in Durham, New Hampshire, April 22-23, 2006; title of talk: "Chromatic A_3 graph homology from geometric properties of graphs", authors: Milena Pabiniak with Jozef H. Przytycki, Radmila Sazdanovic;

19. American Math Society Meeting in Bard College, Annandale-on-Hudson, October 8th 2005; talk: "Introduction to Hochschild homology" together with Prof. Jozef Przytycki and Radmila Sazdanovic;

20. Conference "Knots in Washington XXII", May 5-7 2006; "Chromatic A_3 graph homology from geometric properties of graphs", authors: Milena Pabiniak with Jozef H. Przytycki, Radmila Sazdanovic;

21. Conference "Knots in Washington XXI", December 10th,2005; "On torsion in the first A_3 graph cohomology"

22. Workshops on Khovanov and Hochschild Homology, University of Iowa, Iowa City, September 2005; talk "Computing Hochschild homology using normalized Hochschild complex" together with Radmila Sazdanovic;

23. Geometry Seminar, University of Lodz, Poland; January 5th, 2006 "Introduction to Knot Theory", January 12th, 2006 "Introduction to Khovanov Homology";

CONFERENCES AND WORKSHOPS

1. MIT-RTG Geometry Workshop: the theory and application of polyfolds, August 13–17, 2012;
2. CAST Summer School, Budapest, Hungary; July 9-20 2012;
3. IAS Women and Mathematics Program, May 14-25 2012;
4. Toric Geometry Workshops in Oberwolfach, Germany, April 15-21, 2012;
5. Summer School and Conference on Contact and Symplectic Geometry, University of Nantes, France, May 30-June 18, 2011;
6. Affine Schubert Calculus Workshops and Summer School, Fields Institute, Toronto, Canada, July 7-15th 2010;
7. Geometry Summer School, Lisbon, July 13-17 2009;
8. XVIII Oporto Meeting on Geometry, Topology and Physics, July 9-12, Porto, Portugal;
9. MSRI Summer School "Toric Varieties", June 15-26, 2009,
10. MSRI Workshops "Combinatorial, Enumerative and Toric Geometry", March 23-29, 2009,
11. IAS Summer Program for Women in Mathematics, May 12-23 2008, Orbifolds, Knots and 3-Manifolds;
12. Graduate Student Topology Conference, Indiana University, Bloomington, April 1-2, 2006;
13. Graduate Student Topology Conference, University of Chicago, April 21-22 2007;
14. PCMI Summer School for Graduate Students, Low Dimensional Topology, June 26-July 15, 2006;

HONORS AND AWARDS

- 2010/2011 Eleanor Norton York Award in Mathematics. This reward is assigned by Cornell University,
- Elite grant of Polish Minister of Education (year 2004/2005, Lodz, Poland);