Curriculum Vitae of Michael Finkelberg

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Date of birth: July 1st, 1967

Place of birth: Moscow, Russia

Citizenship: Russian

Positions: State University Higher School of Economics, Department of Mathematics (2008 – present), Professor

Institute for Advanced Studies, Hebrew University of Jerusalem, Fall 2010, Member

Sydney University, November 2009, Visiting Professor

Independent Moscow University, College of Mathematics (1993 – 2007), Professor

UMass, Amherst, Spring 1996, Spring 2002, Visiting Professor

Institute for Advanced Study, Princeton, September 1998 – June 1999, January 2008 – April 2008, Member

CNRS Laboratoire de Luminy, October – December 2000, Researcher

Clay Mathematics Institute, September 2001 – January 2002, October 2003 – December 2003, Scholar (at the University of Chicago)

Weizmann Institute of Science, Israel, June – July 2004, Visiting Scientist

RIMS, Kyoto University, Japan, August 2004, Researcher

University of Chicago, April – May 2005, Visiting researcher

MSRI, March – April 2006, Research Professor

Indiana University at Bloomington, January – May 2007, Visiting professor

Université Paris VI, October – December 2007, Senior Researcher

Institute for Advanced Study, Princeton, January – April 2008, Member

Education: Ph.D. in Mathematics (D.Kazhdan adviser), June 1993, Harvard University.

B.S., June 1988, Oil and Gas Institute, Moscow, Russia.

Awards: A.P.Sloan Doctoral Dissertation Fellowship (1992-1993)

Civilian Research and Development Foundation awards RM1-265 (1996-1998), RM1-2545-MO-03 (2003-2005), RUM1-2694 (2006–2008) "Complex symplectic geometry".

ANR program "Geometry and integrability in mathematical physics", contract number ANR-05-BLAN-0029-01 (2005–2007).

RFBR grant 09-01-00242-a (2009–2011) "Geometry and combinatorics of double affine Grassmannian", Science Foundation of the SU-HSE award 09-08-0008 (2009) "Geometry of functional spaces", 09-09-0009 (2009), 10-09-0015 (2010), 11-09-0033 (2011) "Geometry and combinatorics of double affine Grassmannian".

The Ministry of Education and Science of Russian Federation, grant No. 2010-1.3.1-111-017-029, the AG Laboratory HSE, RF government grant, ag. 11.G34.31.0023.

Invited talks: Edinburg University (Isle of Skye) (2010)
Sydney University (2009),
UMass Amherst (1996, 2002),
IAS (1998-1999, 2008),
MIT (1998, 2002),
UPenn (1998),
Rutgers (1998),
Aarhus (1998),
Luminy (2000, 2005, 2009, 2011),
Toulouse (2000),
Freiburg (2000), colloquium talk,
Angers (2000),
Lyon (2000),
Toronto (2001),
MSRI (2002),
Weizmann Institute (2002, 2004), colloquium talk,
Northwestern University (2003),
Institut Mittag-Leffler (2004),
RIMS Kyoto (2004),
1001'st AMS annual meeting Evanston (2004),
University of Chicago (2004),
Steklov Mathematical Institute Moscow (2005, 2007, 2011),
Oberwolfach (2005, 2009),
Goettingen (2005),
Eugene (2005, 2006), colloquium talk,
Warwick (2005),
Jerusalem University (2005),
Indiana University (2007).
Newton Institute, Cambridge (2009).

US Teaching experience: 3D Calculus, Harvard University, Spring 1993; Linear Algebra, UMass Amherst, Spring 1996, 2002; Calculus, Indiana University Bloomington, Spring 2007.

Sample courses taught at the IMU: Undergraduate Algebra, Fall 1997, Spring 1998, Fall 2004, Fall 2005; Homological Algebra, Fall 1999, Spring 2000; Number Theory, Spring 1995, Fall 1995; Quivers and Quantum groups, Spring 2001.

Publications:

26. Finkelberg, Michael; Ginzburg, Victor *Cherednik algebras for algebraic curves*, Progress in Mathematics **284** (2010), 121–153.

25. Finkelberg, Michael; Ginzburg, Victor *on Mirabolic D-modules*, International Mathematics Research Letters **2010**, No. 15, 2947–2986.

24. Finkelberg, Michael; Lysenko, Sergey *Twisted geometric Satake equivalence*, Journal of the Institute of Mathematics of Jussieu **9** (2010), no. 4, 719–739.

23. Braverman, Alexander; Finkelberg, Michael *Pursuing the double affine Grassmannian. I. Transversal slices via instantons on A_k-singularities*, Duke Mathematical Journal **152** (2010), no. 2, 175–206.

22. Finkelberg, Michael; Ginzburg, Victor; Travkin, Roman *Mirabolic affine Grassmannian and character sheaves*, Selecta Mathematica New Series 14 (2009), 607–628.

21. Bezrukavnikov, Roman; Finkelberg, Michael; Ostrik, Victor *On tensor categories attached to cells in affine Weyl groups, III*, Israel Journal of Math. 170 (2009), 207–234.

20. Bezrukavnikov, Roman; Finkelberg, Michael *Equivariant Satake category and Kostant-Whittaker reduction*, Moscow Math. Journal 8 (2008), 39–72.

19. Bezrukavnikov, Roman; Finkelberg, Michael; Ginzburg, Victor *Cherednik algebras and Hilbert schemes in characteristic p.* Representation Theory 10 (2006), 254–298.

18. Braverman, Alexander; Finkelberg, Michael; Gaitsgory, Dennis *Uhlenbeck spaces via affine Lie algebras.* Progress in Mathematics 244 (2006), 17–135.

17. Braverman, Alexander; Finkelberg, Michael *Finite difference quantum Toda lattice via equivariant K-theory.* Transformation Groups 10 (2005), no. 3-4, 1–23.

16. Bezrukavnikov, Roman; Finkelberg, Michael; Mirković, Ivan *Equivariant homology and K-theory of affine Grassmannians and Toda lattice.* Compositio Math. 141 (2005), no. 3, 746–768.

15. Finkelberg, Michael; Gaitsgory, Dennis; Kuznetsov, Alexander *Uhlenbeck spaces for $\mathbb{A}^2$ and affine Lie algebra $\widehat{\mathfrak{sl}}_n$.* Publ. Res. Inst. Math. Sci. 39 (2003), no. 4, 721–766.

14. Finkelberg, Michael; Ginzburg, Victor *Calogero-Moser space and Kostka polynomials.* Adv. Math. 172 (2002), no. 1, 137–150.

13. Braverman, A.; Finkelberg, M.; Gaitsgory, D.; Mirković, I. *Intersection cohomology of Drinfeld's compactifications.* Selecta Math. (N.S.) 8 (2002), no. 3, 381–418.

12. Finkelberg, Michael; Kuznetsov, Alexander *Parabolic sheaves on surfaces and affine Lie algebra $\widehat{\mathfrak{gl}}_n$.* J. Reine Angew. Math. 529 (2000), 155–203.

11. Feigin, Boris; Finkelberg, Michael; Kuznetsov, Alexander; Mirković, Ivan *Semi-infinite flags. II. Local and global intersection cohomology of quasimaps' spaces.* Differential topology, infinite-dimensional Lie algebras, and applications, 113–148, Amer. Math. Soc. Transl. Ser. 2, 194, Amer. Math. Soc., Providence, RI, 1999.

10. Finkelberg, Michael; Mirković, Ivan *Semi-infinite flags. I. Case of global curve $\mathbb{P}^1$.* Differential topology, infinite-dimensional Lie algebras, and applications, 81–112, Amer. Math. Soc. Transl. Ser. 2, 194, Amer. Math. Soc., Providence, RI, 1999.

9. Finkelberg, Michael; Kuznetsov, Alexander; Markarian, Nikita; Mirković, Ivan *A note on a symplectic structure on the space of G-monopoles.* Comm. Math. Phys. 201 (1999), no. 2, 411–421.

8. Finkelberg, M.; Kuznetsov, A.; Mirković, I. *The singular supports of IC sheaves on spaces of quasimaps are irreducible.* Topics in quantum groups and finite-type invariants, 85–93, Amer. Math. Soc. Transl. Ser. 2, 185, Amer. Math. Soc., Providence, RI, 1998.

7. Bezrukavnikov, Roman; Finkelberg, Michael; Schechtman, Vadim *Factorizable sheaves and quantum groups.* Lecture Notes in Mathematics, 1691. Springer-Verlag, Berlin, 1998. x+287 pp.

6. Finkelberg, Michael; Kuznetsov, Alexander *Global intersection cohomology of quasimaps' spaces.* Internat. Math. Res. Notices 1997, no. 7, 301–328.

5. Finkelberg, M.; Schechtman, V. *Localization of modules over small quantum groups.* Algebraic geometry, 5. J. Math. Sci. 82 (1996), no. 1, 3127–3164.

4. Finkelberg, M. *An equivalence of fusion categories.* Geom. Funct. Anal. 6 (1996), no. 2, 249–267.

3. Finkelberg, M. *The orthogonal Maslov index.* (Russian) Funktsional. Anal. i Prilozhen. 29 (1995), no. 1, 92–95; translation in Funct. Anal. Appl. 29 (1995), no. 1, 72–74

2. Vishik, A.; Finkelberg, M. *The coordinate ring of general curve of genus $g \geq 5$ is Koszul.* J. Algebra 162 (1993), no. 2, 535–539.

1. Bressler, P.; Finkelberg, M.; Lunts, V. *Vanishing cycles on Grassmannians.* Duke Math. J. 61 (1990), no. 3, 763–777.