

Dmitry N. Akhiezer: Curriculum Vitae

Born in 1947 in Moscow, married, one daughter. Residency: Moscow, Russia.
Email: akhiezer@iitp.ru

Education

- School: September 1954 - June 1965.
- Student of Lomonosov University (Moscow), Department of Mathematics and Mechanics: September 1965 - June 1970. Diploma in mathematics (June 1970).
- PhD student at Lomonosov University (Moscow), Department of Mathematics and Mechanics, Chair of Algebra: October 1970 - October 1973.
Thesis advisor: Prof. A.L.Onishchik.

Promotions

- PhD in Mathematics, Lomonosov University, Moscow, December 21, 1973. First (candidate) dissertation: On Some Classes of Compact Complex Homogeneous Spaces.
- Doctor of Science degree in Mathematics, University of St. Petersburg, October 9, 1991 (approved January 3, 1992). Second (doctoral) dissertation: Almost Homogeneous Spaces of Complex Linear Algebraic Groups.

Permanent positions

- Assistant Professor, Moscow Construction Engineering University, 1973 - 1992.
- Full Professor, Moscow Construction Engineering University, 1992 - 1999.
- Professor, Independent University of Moscow, 1997 - .
- Research Fellow, Institute for Information Transmission Problems, Russian Academy of Sciences, 1999 - .

Visiting positions

- Visiting Professor, Ruhr University, Bochum, Germany, November 1992 - June 1994, January 1999 - December 1999.
- Research Fellow, CNRS, Fourier Institute, Grenoble, France, September 1995 - December 1995.
- Visiting Professor, Yale University, USA, January 2002 - May 2002.
- Visiting Scientist, Midsweden University, Sundsvall, Sweden, April 2003 - June 2003, April 2004 - June 2004.
- Visiting Professor, University of Bern, Switzerland, April 2006 - June 2006.

Areas of research

- Algebraic groups and Lie groups.
- Complex spaces with large automorphism groups.
- Geometric representation theory.

Some graduate courses

- Homogeneous Complex Manifolds, Independent University of Moscow, Spring 1997.
- Analysis on Homogeneous Complex Manifolds, Independent University of Moscow, Fall 1997.
- Lineare Darstellungen und Geometrie (Linear Representations and Geometry), Ruhr University, Bochum, Germany, 1999.
- Complex Spaces, Yale University, Spring 2002.
- Stein Spaces, Midsweden University, Sundsvall, Sweden, Spring 2004.
- Liegruppen and Liealgebren, University of Bern, Spring 2006.
- Weakly Symmetric Spaces and Spherical Varieties, Rome, "Tor Vergata", Fall 2009.

Fellowships and Grants

- Alexander von Humboldt Stiftung/Foundation, Germany, 1990.
- Deutsche Forschungsgemeinschaft, SFB 237, Germany, 2000.
- Russian Foundation for Basic Research, Grants 89-01-00329, 01-01-00709, 07-01-00230, 11-01-00465a.
- Swedish Foundation for International Cooperation in Research and Higher Education, 2003 - 2004.
- Deutsche Forschungsgemeinschaft, Forschungsschwerpunkt "Globale Methoden in der komplexen Geometrie" ("Global methods in complex geometry"), Germany, 2005.
- Deutsche Forschungsgemeinschaft, SFB TR12 "Symmetrien und Universalität in mesoskopischen Systemen" ("Symmetries and universality in mesoscopic systems"), Germany, 2003 - 2008.

Recent public lectures and presentations at conferences and workshops

- Workshop on Geometric Representation Theory, MSRI, Berkeley, October 2001 (invited participant, speaker at the Seminar on Representation Theory, University of California, Berkeley).
- NORDAN 2005 "Complex Analysis, Complex Geometry and Complex Dynamics", Sigtuna, Sweden, April 2005 (invited speaker).
- International conference "Transformation Groups" (a celebration of the 70th birthday of E.B.Vinberg), Independent University of Moscow, December 2007 (invited speaker).
- Workshop on Lie Groups, Algebraic Groups and Transformation Groups, Bielefeld, Germany, July 2008 (invited speaker).
- International conference "Complex Analysis and Dynamical Systems IV", The Galilee Research Center for Applied Mathematics, Israel, May 2009 (invited speaker).
- Workshop "Lie Transformation Groups and Complex Geometry", Yuzawa, Japan, September 2010 (invited speaker).
- Second conference "Lie Algebras, Algebraic Groups and Invariant Theory", Moscow State University, January 2011 (invited speaker).
- International conference "Journées Complexes Lorraines 2011", Institut É. Cartan, Université Henri Poincaré, Nancy, May 2011 (invited speaker).
- Workshop "Journées de Géométrie Algébrique Affine", Institut J. Fourier, Grenoble, May 2011 (invited speaker).

- International conference "50 Years of IITP", Moscow, July 2011 (invited speaker).

Professional service

- Referee for Russian and international mathematical journals.
- Reviewer for Mathematical Reviews.
- Member of Committees for Evaluation of Dissertations in Mathematics (Institute for Information Transmission Problems; Yaroslavl University).

Book

- Lie Group Actions in Complex Analysis, Aspects of Mathematics, Vieweg-Verlag, Braunschweig-Wiesbaden, 1995

Book translations

- H.Grauert, R.Remmert, Analytische Stellenalgebren, Springer-Verlag, 1971; Russian translation: Nauka, Moscow, 1988;
- H.Grauert, R.Remmert, Theorie der Steinschen Räume, Springer-Verlag, 1977; Russian translation: Nauka, Moscow, 1989.

Some journal publications

- On the cohomology of compact complex homogeneous spaces, Matem. Sbornik 84, 2 (1971), 290 - 300; 87, 4 (1972), 587 - 593 (in Russian).
- Compact complex homogeneous spaces with solvable fundamental group, Izvestija Akad. Nauk SSSR (ser. matem.) 38, 1 (1974), 59 - 80 (in Russian).
- On the homotopy classification of complex homogeneous spaces, Trudy Mosk. Matem. Obshch. 35 (1976), 2 - 20 (in Russian); Trans. of the Moscow Math. Soc. 1 (1979), 1 - 19.
- Dense orbits with two ends, Izvestija Akad. Nauk SSSR (ser. matem.) 41, 2 (1977), 308 - 323 (in Russian); Math. USSR Izvestija 11, 2 (1977), 293 - 307.
- Invariant meromorphic functions on complex semisimple Lie groups, Inventiones Math. 65, 3 (1981), 325 - 329.
- Compact groups of automorphisms of Stein manifolds, Compt. Rend. de l'Acad. Bulgare des Sciences 35, 5 (1982), 577 - 580.
- An estimate of the dimension of the automorphism group of a compact complex homogeneous space, Soobshch. Akad. Nauk Gruz. SSR 110, 3 (1983), 469 - 472 (in Russian).
- Equivariant completions of homogeneous algebraic varieties by homogeneous divisors, Annals of Glob. Anal. and Geom. 1, 1 (1983), 49 - 78.
- Invariant analytic hypersurfaces in complex nilpotent Lie groups, Annals of Glob. Anal. and Geom. 2, 2 (1984), 129 - 140.
- On algebraic varieties that are symmetric in the sense of Borel, Doklady Akad. Nauk SSSR 279, 1 (1984), 13 - 16 (in Russian); Soviet Math. Dokl. 30, 3 (1984), 579 - 582.
- On actions with finitely many orbits, Funk. Anal. i ego Pril. 19, 1 (1985), 1 - 5 (in Russian); Funktional Anal. and its Appl. 19 (1985), 1 - 4.

- Homogeneous complex manifolds, in "Sovremennije problemy matematiki. Fundamentalnije napravlenija. Tom 10", Moscow, 1986, 223 - 275 (in Russian); translated in Encyclopedia of Math. Sciences, vol. 10, Springer-Verlag, 1990, 195 -244.
- On the modality and complexity of actions of reductive groups, Uspekhi Matem. Nauk 43, 2 (1988), 129 - 130 (in Russian); Russian Math. Surveys 43, 2 (1988), 157 - 158.
- On the concept of the rank of a spherical homogeneous space, Uspekhi Matem. Nauk 43, 5 (1988), 175 - 176 (in Russian); Russian Math. Surveys 43, 5 (1988), 205 - 206.
- (with S. G. Gindikin) On Stein extensions of real symmetric spaces, Math. Annalen 286 (1990), 1 - 12.
- Equivariant complex extensions of homogeneous spaces, Math. Zametki 51, 6 (1992), 3 - 9 (in Russian).
- Invariant plurisubharmonic functions and geodesic convexity, Expo. Math. 11 (1993), 261 - 270.
- On Lie algebra decompositions, related to spherical homogeneous spaces, Manuscripta Math. 80 (1993), 81 - 88.
- (with B.Gilligan) On complex homogeneous spaces with top homology in codimension two, Canadian Journal of Mathematics 46 (1994), 897 - 919.
- Group actions on the Dolbeault cohomology of homogeneous manifolds, Math. Zeitschrift, 226, 4 (1997), 607 - 621.
- (with J.-J.Loeb) Enveloppes holomorphiquement convexes invariantes, C.R.A.S. Paris, t.326, Série I (1998), 1279 - 1282.
- (with E.B.Vinberg) Weakly symmetric spaces and spherical varieties, Transformation Groups, 4, 1 (1999), 3 - 24.
- An estimate of multiplicities in the branching rule for a Levi subgroup, Indagationes Math., 11, 4 (2000), 477 - 486.
- On geodesically convex functions on symmetric spaces, Math. Nachr., 227 (2001), 5 - 17.
- (with D.I.Panyushev) Multiplicities in the branching rules and the complexity of homogeneous spaces, Moscow Math. Journal, 2, 1 (2002), 17 - 33.
- A remark on averaging operators on homogeneous spaces, Archiv Math., 78 (2002), 196 - 201.
- Asymptotic distribution of eigenvalues for certain elements of the group ring of a compact Lie group, Amer. Math. Soc Transl. (2) Vol. 210 (2003), 1 - 10.
- (with P.Heinzner) Spherical Stein spaces, Manuscripta Math. 114 (2004), 327 - 334.
- Real forms of complex reductive groups acting on quasi-affine varieties, Amer. Math. Soc. Transl. (2) Vol. 213 (2005), 1 - 13.
- On the eigenvalues of the Coxeter Laplacian, Journal of Algebra, 313, 1 (2007), 4 - 7.
- (with A.Püttmann) Antiholomorphic involutions of spherical complex spaces, Proc. Amer. Math. Soc. 136, 5 (2008), 1649 - 1657
- Spherical Stein manifolds and the Weyl involution, Annales d'Institut Fourier, Grenoble 59, 3 (2009), 1029 - 1041
- Stein manifolds and multiplicity-free representations of compact Lie groups, Contemporary Mathematics, American Mathematical Society, 554 (2011), 1 - 12.