Curriculum vitae
Mark L. Agranovsky

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WORK ADDRESS: Department of Mathematics, Bar-Ilan University; Ramat-Gan 52900, Israel

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PERSONAL DATA: Born 1946, Novosibirsk, Russia; Married, + 1

EDUCATION:

1987	Doctor of Science degree in Mathematics Institute of Mathematics, Siberian Branch of Russian Academy of Science, Novosibirsk
1972	Ph.D. in Mathematics, Institute of Mathematics, Siberian Branch of Russian Academy of Science, Novosibirsk (with excellence).
1968	MS in Mathematics (with excellence),
1966-1967	Novosibirsk State University
1967-1968	Moscow State University

FIELDS OF RESEARCH: Harmonic Analysis, Complex Analysis, Integral Geometry, Inverse Problems

PROFESSIONAL EXPERIENCE:

1991-present Full Professor, Bar-Ilan University

1988-1991	Full Professor, Novosibirsk State University,
1976-1988	Associate Professor, Novosibirsk State University,
1973-1976	Assistant Professor, Novosibirsk State University,
1969-1973	Teaching Assistant, Novosibirsk State University,
1976-1991	Senior Researcher,
1971-1976	Researcher, Inst. of Automation and Electrometry, Siberian Branch of Russian Acad. Sci., Novosibirsk

AWARDS and GRANTS:

1991	Guastella Award, Academy of Science of Israel.
1992-1995	Israel Science Foundation grant, Academy of Science of Israel.
1993-1996	Bi-National Israel - U.S. Sci. Foundation (BSF) grant.
1998-2000	Israel-Slovenia grant, Ministries of Sci. of Israel and Slovenia
2002-2005	Israel Science Foundation grant, Academy of Science of Israel
2008-2012	Israel Science Foundation grant, Academy of Science of Israel

ACADEMIC AND ADMINISTRATIVE POSITIONS:

2012-	Acting Director, Gelbart Institute for Mathematical Sciences
2000-2001	Chairman, Department of Mathematics, BIU
1998-2000	Associate Chairman, Department of Mathematics, BIU
2012-	Gelbart Institute for Mathematical Research, Head of Board
2001-2008	Member, Academic Council, Ort Braude College
1989-1991	Member of Granting Ph.D. degree, Institute of Mathematics, Siberian Branch of Russian Acad. Sci.

PUBLIC SCIENTIFIC ACTIVITIES:

1976-1991	Siberian Mathematical Society	Member
1992-present	Israel Mathematical Union	Member
1993-present	American Mathematical Society	Member
1993-present	European Mathematical Society	Member
2010-present	Council of EMS	Member

Since 1991, visiting professor in many universities of Europe and USA, invited speaker on international conferences.

LIST OF PUBLICATIONS

BOOKS

1. Invariant Function Spaces on Homogeneous Manifolds of Lie Groups and Applications, Trans. of Monographs, American Math. Soc., 126, (1993), 131 pp.

2. Spherical Mean Operators and Their Applications, jointly with P.Kuchment, in preparation.

ARTICLES

3. Parametric argument principle and its applications to CR functions and manifolds, submitted.

4. Analyticity on curves, with L. Zalcman, The Mathematical Legacy of Leon Ehrenpreis, Springer Proceedings in Mathematics, 2012, Volume 16, Part 2, 25-44.

5. Characterization of polynalytic functions by meromorphic extensions into chains of circles, Journal d'Analyse Mathematique (2011), 113, 305-329.

6. Analog of a theorem of Forelli for boundary values of holomorphic functions on the unit sphere in C^n, Journal D'Analyse Mathematique (2011),113, 293-304.

7. Complex Analysis and Dynamical Systems, Part I, Part II, Israel Math. Conf. Proc., Contemp. Math., 2011, 553, 317 pp., editor, with M. Ben-Artzi, G. Galloway, S. Reich, D. Shoikhet, G. Weinstein and L. Zalcman.

8. Malmheden's theorem revisited, with D.Khavinson and H.S.Shapiro, Expositiones Mathematicae Volume 28, Issue 4, 2010, Pages 337350

9. Range characterization for the spherical mean transform and global extendibility of solutions of Darboux equation, with Nguen V. Linh, Journal d'Analyse Mathematique (2010), 112,1m 351-367.

10. Range description for the spherical means transform, with D. Finch and P.Kuchment, Inverse Problems and Imaging, v.3, no.3, 2009, 373-382.

11. The support theorem for the single radius spherical mean transform, with P. Kuchment, Memoirs on Differential Equations and Mathematical Physics 52 (2011), 1-16.

12. On reconstruction formulas and algorithms for the thermoacoustic tomography, with P. Kuchment and L. Kunyansky, Ch.8 in H. Wang (Editor), "Photoacoustic imgaing and spectroscopy", CRS Press, 2009, pp. 89-101.

13. Integral geometry and spectral analysis, in Topics in Mathematical Analysis, Series on Analysis, Applications and Computation-vol. 3, P. Ciatti, E. Gonzalez, M. Lanza de Cristoforis, G. P. Leonardi (Editors), World Scientific, 2008, 281-320.

14. Complex Analysis and Dynamical Systems, Israel Math. Conf. Proc., Contemp. Math., 2008, 455, editor, with D. Bshouty, L.Karp, S. Reich, D. Shoikhet and L. Zalcman.

15. Uniqueness of reconstruction and an inversion procedure for thermoacoustic and photoacoustic tomography with variable sound speed, with P. Kuchment, Inverse Problems, 23 (2007), no.5 ,2089-2102

16. Complex dimension of real manifolds, attached analytic discs and parametric argument principle, 2007, Preprint.

17. Range description for the spherical mean Radon transform,with P. Kuchment and E.T. Quinto, J. Funct. Anal., 248 (2007),344-386.

18. Propagation of boundary CR-foliation and Morera type theorems for manifolds with attached analytic discs, Adv. in Math, 2007, Advances in Math., 211 (2007), 284-326.

19. CR-foliations, the strip-problem and Globevnik-Stout conjecture, C. R. Math. Acad. Sci.Paris 343 (2006), no. 2,91-94.

20. Isotopic families of contact manifolds for elliptic PDE. with. E.K. Narayanan, Proc. AMS, 134 (2006), no. 7, 2117-2123.

21. A local two-radii theorems for the twisted convolution, with E.K. Narayanan, Complex Analysis and Dynamical Systems, Israel Math. Conf. Proc., Contemp. Math., 382, AMS, Providence, RI, 2005, 13-27.

22. Lawrence Zalcman at sixty, with D. Shoikhet, Complex Analysis and Dynamical Systems II. Proc. of the 2nd Int. Conf. CADS II, held in honor of Professor Lawrence Zalcman's 60th birthday in Naharia, June 9-12,2003. Contemp. Math.,382, 2005, 432 pp.

23. Complex Analysis and Dynamical Systems, Israel Math. Conf. Proc., Contemp. Math., 2005, 364, 260 pp., editor, with L.Karp, D. Shoikhet and L. Zalcman.

24. Injectivity of the spherical mean operator on the conical manifolds of spheres, with E.K. Narayanan. (Russian) Sibirsk. Mat. Zh. 45 (2004), no. 4,723-733; transl. in Siberian Math. J. 45 (2004), no. 4,597-605.

25. Ł^p-integrability, supports of Fourier transforms and uniqueness for convolution equations, with E.K. Narayanan. J. Fourier Anal. Appl. 10 (2004), no. 3, 315-324.

26. Analyticity on circles for rational and real-analytic fucntions of two real variables, with. J. Globevnik. J. Anal. Math. 91 (2003), 31-65.

27. Stationary sets for the wave equation in crystallographic domians, with E.T. Quinto. Trans. Amer. Math. Soc. 355 (2003), no. 6, 2439-2451.

28. Geometry of stationary sets for the wave equation in R^n: the case of finitely supported initial data, with E.T. Quinto. Duke Math.J., 107 (2001), no. 1,57-84.

29. Quadratic divisors of harmonic polynomials in R^n, with Ya. Krasnov. J. Anal. Mayth. 82 (2000), 379-395.

30. On a problem of injectivity for the Radon transform on a paraboloid. Analysis,geometry, number theory: the mathematics of Leon Ehrenpreis (Philadelphia, PA, 1998), 1-14, Contemp. Math. 251, Amer. math. Soc., Providence, RI, 2000.

31. Injectivity sets for spherical means on the Heisenberg group, with R.Rawat. J. Fourier Anal. Appl. , 5 (1999), no. 4, 363-372.

32. Conical uniqueness sets for the spherical Radon transform, with V.V. Volchkov and L. Zalcman. Bull. London Math. Soc. 31 (1999), no. 2, 231-236.

33. Radon transforms on polynomial level sets and related problems. Proceedings of the Ashkelon Workshop on Complex Function Theory (1996), 1-21, Israel Math. Conf. Proc.,11, 1997.

34. Injectivity sets for the Radon transform over circles and complete systems of radial functions, with E.T. Quinto. J. Funct. Anal. 139 (1996), no.2, 383-414,

35. Injectivity of the spherical mean operator and related problems, with E.T. Quinto, Complex analysis, harmonic analysis and application (Bordeaux,1995), 12-36, Pitman Res. Notes Math. Ser.,347,Longman,Harlow,1996.

36. Approximation by spherical waves in L^p-spaces, with C. Berenstein and P. Kuchment, J. of Geom. Anal. 6 (1996), no.3, 365-383.

37. Deformations of geodesic balls in the Schiffer conjecture for Riemann symmetric spaces, with A.M.Semenov, Israel Math. J., v. 95 (1996), 43-50.

38. Remarks on a conjecture of Ruscheweyh, with T.M. Bandman, Complex Variables Theory Appl.31 (1996),no.3,249-258.

39. Injectivity sets for the Radon transform over circles and complete systems of radial functions, with E.T. Quinto, J. Funct. Anal., v. 139, 2 (1996), 383-414.

40. Injectivity for a Radon transform and complete systems of radial functions, with E.T. Quinto, Int'L Math. Research Notes, 1 (1994), 467-472.

41. Injectivity of the Pompeiu transform in the Heisenberg group, with C. Berenstein, Der Chen Chang, and D. Pascuas, J. d'Analyse Math., 63 (1994),131-173.

42. Ergodic and mixing properties of radial measures on the Heisenberg group, with C. Berenstein and D.-C. Chang, in: "Fourier Analysis," ed. Bray, Milojevic, Stanojevic, Lecture Notes in Pure and Applied Math., v. 157, 1994, 1-14.

43. Morera-theorem for holomorphic H^p spaces in the Heisenberg group, with C. Berenstein and Der Chen Chang, J. Reine un Angew. Math., 443 (1993), 49-89.

44. On the stability of the spectrum in the Pompeiu problem, J. of Math. Anal. and Appl., 178, No 1 (1993), 269-279.

45. Theoremes de Morera et Pompeiu pour le groupe de Heisenberg, with C. Berenstein, Der Chen Chang, and D. Pascuas, (in French), Compt. Rend. Acad. Sci., t. 314, Serie 1, (1992), 665-668.

46. A Morera-type theorem for L^2 functions on the Heisenberg group, with C. Berenstein, Der Chen Chang, and D. Pascuas, J. Analyse Math., 57 (1991), 282-295.

47. Modeling of the optical recording process on chromium films, with V.P. Korol'kov, A.M. Rubenchik, J. of Appl. Phys., 70, (10), (1991), 5224-5230.

48. Boundary analogues of Hartogs' theorem, with A.M. Semenov, Siberian Math. J., 32, 1 (1991), 137-139.

49. On perturbation of the spectrum in the Pompeiu problem, (in Russian), Optimization, Proc. Institute of Math. Siberian Branch Acad. Sci. 48 (65), (1990), 47-57.

50. Poisson integrals in Moebius spaces on complex balls, Siberian Math. J., 31, 6 (1990).

51. $SU(n, m)$ - invariant spaces of holomorphic functions on Stiefel manifolds, with A.M. Semenov, preprint TR90-2, Univ. of Maryland, 1990, 24pp.

52. Reconstruction of holomorphic and pluriharmonic functions by their values on tori in circular domains, with L.A. Aizenberg, Siberian Math. J., 30, 1 (1989), pp. 136-139.

53. The heat modelling of laser recording on chromium films, with A.M. Rubenchik, Report IAE, 1989, 21pp.

54. Modelling of optical recording on chromium films, with V.P. Korolkov, A.M. Rubenchik, (Russian), preprint IAE (1989), 15pp.

55. Moebius function spaces on Shilov boundaries of classical domains of tubular type, Siberian Math. J., 29, 5 (1988), 697-707; letter to editorial board, Siberian Math. J., 31, 3 (1990), p. 528.

56. Holomorphy on unitary-invariant families of curves in C^n, with A.M. Semenov, Siberian Math. J., 29, 1 (1988).

57. Mathematical simulation of the process of optical recording on chromium films, with V.P. Korolkov, A.M. Rubenchik, (in Russian), All-Union Conference on Laser Technology in Microelectronics, Vilnjus, 1988,p.10.

58. Representation theory methods in problems of complex analysis, with A.M. Semenov, in: "Complex Analysis and Mathematical Physics", Institute of Physics, Krasnoyarsk, 1987, 19-21.

59. Invariant function spaces on homogeneous manifolds of Lie groups and their applications, Doctoral dissertation, Institute of Math., Siberian Branch Acad. Sci., Novosibirsk, 1987, 272 pp.

60. Remarks about one-dimensional holomorphic extension, with A.M. Semenov, in: "Complex Analysis and Mathematical Physics", Institute of Physics, Krasnoyarsk, 1987, 16-18.

61. Invariant function spaces and algebras on the Heisenberg group, Siberian Math. J., 28, 3 (1987), 358-375.

62. Digital image processing for searching of rotation structures, with T.M. Bandman (in Russian), in: "Numerical methods in Geology and Computers Software", Computer Center of Siberian Branch Acad. Sci. (1987), 13-21.

63. Affine-invariant function algebras on the Heisenberg group, Soviet Math. Dokl. 27 (1986),53-56.

64. Moebius function spaces on Shilov boundaries of Cartan domains of classical type, (in Russian), Preprint IAE 330, 1986, p. 24.

65. An algorithm in digital image processing for discovering circular structures, (in Russian), with T.M. Bandman, Preprint IAE, 312 (1986), p. 16.

66. An algorithm for automatic determination of coordinates of centres of rotation structures on pictures (in Russian), with T.M. Bandman, Report IAE, 529, 1985.

67. Invariant function algebras on symmetric domains, Trans. Moscow Math. Soc., 47 (1985), 175-197.

68. Invariant function algebras on symmetric domains, Trans. Moscow Math. Soc., 47 (1985), 175-197.

69. Reconstruction problems in non-translation-invariant systems, (in Russian), in: "Methods and Tools in Image Processing," IAE, Novosibirsk (1984), 24-33.

70. The correction of space-dependent distortions of pictures in moved optical systems, (in Russian), Autometry, 5 (1984) 51-61.

71. Invariant function spaces and traces of holomorphic functions on skeletons of symmetric domains , (in Russian), Siberian Math. J., 25, 2 (1984), 167-175.

72. Approximative mathematical models of heat interaction of the pipelines with frozen ground, qualitative analysis and evaluations (in Russian), with T.M. Bandman, Report IAE 495, 1984, 94-96.

73. Spaces of functions in the disc that are invariant with respect to multiplication by z and conformal shifts, Siberian Math. J., 22, 3 (1982), 329-333.

74. Elaboration of the kinoform synthesis method, based on assymptotic relations, with R.D. Baglai and K.K. Smirnov (in Russian), Report of IAE, 1981, 121-124.

75. Test for holomorphy in symmetric domains, Siberian Math. J., 22, 2 (1981), 171-179.

76. Invariant function algebras on homogeneous spaces of noncompact semisimple Lie groups, Math. Notes, 28, 5 (1981), 779-783.

77. On a problem in integral geometry, related to image processing, (in Russian),Autometry, 4 (1980), 83-86.

78. Characterizations of frequency-phase signals , (in Russian), Autometry, 1 (1979), 3-10.

79. Invariant spaces of continuous functions in symmetric domains, IV All-Union School on Operator Theory, Minsk, Belorussian Univ., 1978, p.12.

80. On an expansion in Hilbert space and its applications, with R.D.Baglai, J. Comp. Math. and Math. Phys., 17, 4 (1977), 872-878; English translation, (1978), 57-64.

81. Fourier transforms on $SL(2, R)$ and Morera type theorems, Soviet Math. Dokl, 19 (1978), 1522-1526.

82. Identification of a class of nonlinear operators, with R.E. Baglai and K.K. Smirnov, J. Comput. Math. Phys., 18, 2 (1978), 7-15.

83. Function algebras on symmetric domains, invariant under analytic automorphisms (in Russian), Preprint 76, IAE, Novosibirsk, 1978, p. 32.

84. Antisymmetric algebras of differentiable functions on smooth manifolds, Siberian Math. J., 18, 2 (1977), pp. 327-329.

85. On works in functional analysis, with G.P. Akilov, Yu. M. Vuvunikjan and S.S. Kutateladze (in Russian), "Optimizaciya," Proc. of Institute of Mathematics, Siberian Branch Acad. Sci. 30 (1974), 10-21.

86. On a problem of identification of characteristics of nonlinear objects, with R. D. Baglai (in Russian), Autometry, 1 (1973), 74-78.

87. Invariant algebras on noncompact Riemannian symmetric spaces, Dokl. Akad. Nauk SSSR, 207 (1972), 513-516; English transl. in Soviet Math. Dokl. 13 (1972).

88. Invariant function spaces and algebras on Riemannian symmetric manifolds, Ph.D. dissertation, Institute of Math., manuscript, Siberian Branch Acad. Sci. Novosibirsk, 1971, 92 pp.

89. Invariant algebras on boundaries of symmetric domains, Soviet Math., Dokl. 12 (1971), 2, 371-374.

90. Maximality of invariant function algebras, with R.E. Valsky, Siberian Math. J., 12 (1971), 1-7.