Curriculum vitae

Alexander Rashkovskii

Personal information

Name as in the current passport	Oleksandr Rashkovskiy		
Date of birth:	31.03.1958	Sex:	male
Nationality:	Norway		
Researcher unique identifier(s) (ORCID, ResearcherID, etc.):	ORCID 0000-0002-8243-531X		
URL for personal website:	https://www.uis.no/nb/profile/1935		

Education

Year	Faculty/department - University/institution - Country
1989	*Ph.D.*: Institute for Applied Mathematics and Mechanics, Donetsk – Ukraine
1980	*MSci.*: Department of Mathematics and Mechanics – Kharkov State University – Ukraine
1975-1980	Department of Mathematics and Mechanics – Kharkov State University – Ukraine

Positions - current and previous
(*Academic sector/research institutes/industrial sector/public sector/other*)

Year	Job title – Employer - Country
2001-	Professor – Institute of Mathematics and Physics, University of Stavanger – Norway
1994-2001	Senior Research Fellow – Mathematical Division, Institute for Low Temperature Physics, Kharkov – Ukraine
1993-2000	Associate professor – Department of Mechanics and Mathematics, Kharkov State University – Ukraine
1991-1993	Associate professor – Kharkov Institute for Engineering and Education – Ukraine
1980-1991	Senior Research Fellow – Mathematical Division, Institute for Low Temperature Physics, Kharkov – Ukraine

Other relevant professional experiences

Year	Description - Role
2018	Organizing Committee of NORDAN-2018 Conference – Head
2013-2017	The department's mobility/exchange program in mathematics and physics, University of Stavanger – Head
2014-2016	Mathematics Group, University of Stavanger – Head
2004-2018	12 PhD Committees in Norway, Sweden, France – Member
1990-2001	Member of the American Mathematical Society – Member
2014-	Vitenskapsakademiet i Stavanger – Member

Track record

- The **total number** of publications during the career: 59
- *A list* of up to ten **key publications**:
  – (with D. Kim) Asymptotic multiplicities and Monge–Ampère masses (with an appendix by Sébastien Boucksom), Math. Ann. 385 (2023), no. 3-4, 1947 – 1972.
  – Rooftop envelopes and residual plurisubharmonic functions}, Ann. Polon. Math. 128 (2022), no. 2, 159 –191.
  – Interpolation of weighted extremal functions, Arnold Math. J. 7 (2021), no. 3, 407–417.
  – (with D. Kim) Higher Lelong numbers and convex geometry, J. Geom. Analysis 31 (2021), no. 1, 2525–2539.
  – (with D. Cordero-Erausquin) Plurisubharmonic geodesics and interpolating sets, Arch. Math. (Basel) 113 (2019), no. 1, 63 –72.
  – Local geodesics for plurisubharmonic functions, Math. Z. 287 (2017), no. 1, 73–83. (4)
  – Extremal cases for the log canonical threshold, C. R. Acad. Sci. Paris, Ser. I, 353 (2015), 21–24.
  – (with P. Thomas) Powers of ideals and convergence of Green functions with colliding poles, Int. Math. Res. Not., 2014, no. 5, 1253–1272.
  – Analytic approximations of plurisubharmonic singularities, Math. Z. 275 (2013), Issue 3, 1217–1238.
  – (with J. Magnusson, R. Sigurdsson, and P. Thomas) Limits of multipole pluricomplex Green functions, Int. J. Math. 23 (2012), No. 6, 38 p.

- Invited presentations to recent conferences and/or international advanced schools:

  – Plurisubharmonic interpolation and extrapolation. NORDAN-2023, Lund, Sweden, 2023
  – Asymptotic multiplicities and Monge-Ampère masses. Mapping problems and complex manifolds in projective spaces, Oslo, Norway, 2022
  – Residual plurisubharmonic functions. Seoul Workshop on Complex Geometry and Analysis, Seoul, Korea, 2022

– Interpolation of weighted extremal functions. Frontiers in Several Complex Variables and Functional Analysis, Ankara, Turkey, 2019.

– Plurisubharmonic geodesics, holomorphic hulls and interpolation. Nasjonalt Matematikermøte, Bergen, Norway, 2018.

– Local geodesics for plurisubharmonic functions. NORDAN-2017, Gothenburg, Sweden, 2017.

– Pluricomplex Green functions. Contemporary Aspects of Analysis, Cyprus, 2017.

– Plurisubharmonic singularities. CIMPA School Géométrie Complexe et Applications, Ziguinchor, Senegal, 2017.

– Analytic and plurisubharmonic singularities. 27th Nordic Congress of Mathematicians, Stockholm, Sweden, 2016.

– Geodesics of plurisubharmonic functions. Midwestern Workshop on Asymptotic Analysis, Fort Wayne, IN, USA, 2016.

- Fellowships, awards and prizes.
    – 1997-1998: MENRT Fellowship: Institut de Mathématique de Jussieu, Paris, France
    – 1994-1995: MESR Fellowship: Université Paris VII, Paris, France

Publication list

Alexander Rashkovskii

1. *Dirichlet problem in the class of pluriharmonic functions in the generalized unit disk.* Teorija Funktsii, Funkts. Anal. Ikh Prilozh. **44** (1985), 98–103.

2. (with L.I. Ronkin) *Subharmonic functions of finite order in a cone.* Soviet Math. Dokl. **36** (1988), 3, 473–477.

3. *An integral representation of subharmonic functions of finite order in a cone.* Sibirskii Mat. Zhurnal **30** (1989), No. 3, 109–123.

4. *Increase and decrease of subharmonic functions in a cone.* Ukrainskii. Mat. Zhurnal **41** (1989), No. 9, 1252–1258.

5. *Order of subharmonic functions in a cone.* Izvestija VUZ Matematika **34** (1990), No. 2, 80–84.

6. *Theorems on compactness of families of subharmonic functions, and majorants of harmonic measures.* Soviet Math. Dokl. **41** (1990), No. 3, 460–462.

7. *Majorants of harmonic measures and uniform boundedness of families of subharmonic functions.* In: Analytic Methods in Probability Theory and Operator Theory. V.A.Marchenko (ed.) Kiev, Naukova Dumka, 1990, 115–127.

8. (with L.I. Ronkin) *Subharmonic functions of finite order in a cone. 1.* Teorija Funktsii, Funkts. Anal. Ikh Prilozh. **54** (1990), 74–89.

9. (with L.I. Ronkin) *Subharmonic functions of finite order in a cone. 2.* Teorija Funktsii, Funkts. Anal. Ikh Prilozh. **55** (1991), 50–58.

10. *On the radial projection of a harmonic measure.* In: Operator Theory and Subharmonic Functions. V.A.Marchenko (ed.) Kiev, Naukova Dumka, 1991, 95–102.

11. (with L.I. Ronkin) *Limit sets of subharmonic functions and measures associated with them in a cone.* Ukrainskii Mat. Zhurnal **43** (1991), No. 2, 247–261.

12. (with L.I. Ronkin) *Subharmonic functions of finite order in a cone. 3.* Teorija Funktsii, Funkts. Anal. Ikh Prilozh. **57** (1993), 17–34.

13. (with L.I. Ronkin) *Extension and approximation of subharmonic functions on a half-plane. Impossibility of extension of plurisubharmonic functions.* Ukrainskii Mat. Zhurnal **46** (1994), 1017–1030.

14. *Currents associated to holomorphic almost periodic mappings,* Mat. Fizika, Analiz, Ceometria **2** (1995), No. 2, 250–269.

15. *Monge-Ampère currents associated to holomorphic almost periodic mappings,* Comptes Rendus Acad. Sci. Paris **321** (1995), Série I, 1553–1558.

16. *Monge-Ampère operators and Jessen functions of holomorphic almost periodic mappings,* Mat. Fizika, Analiz, Geometria **5** (1998), No. 3/4, 274–296.

17. (with S.Yu. Favorov and L.I. Ronkin) *Almost periodic sets in a strip,* Doklady NAN Ukraine, 1998, No. 12, 37–39.

18. *Maximal plurisubharmonic functions associated to holomorphic mappings*, Indiana Univ. Math. J. **47** (1998), No. 1, 297–309.

19. (with S. Favorov and L. Ronkin) *Almost periodic divisors in a strip*, J. Anal. Math. **74** (1998), 325–345.

20. (with S. Favorov and L. Ronkin) *Almost periodic currents and holomorphic chains*, Comptes Rendus Acad. Sci. Paris **327** (1998), Serie I, 445–449.

21. *Eigenvalues of positive* $(1,1)$-*currents*, Comptes Rendus Acad. Sci. Paris **326** (1998), Série I, 1289–1293.

22. (with P. Lelong) *Local indicators for plurisubharmonic functions*, J. Math. Pures Appl. **78** (1999), 233–247.

23. (with Yu. Lyubarskii) *Complete interpolating sequences for Fourier transforms supported by convex symmetric polygons*, Ark. Mat. **38** (2000), no. 1, 139–170.

24. *Plurisubharmonic functions with multicircled singularities*, Visnyk Hark. Nats. Univ. **475** (2000), 162–169.

25. *Newton numbers and residual measures of plurisubharmonic functions*, Ann. Polon. Math. **75** (2000), no. 3, 213–231.

26. *Indicators for plurisubharmonic functions of logarithmic growth*, Indiana Univ. Math. J. **50** (2001), no. 3, 1433–1446.

27. *Lelong numbers with respect to regular plurisubharmonic weights*, Results Math. **39** (2001), 320–332.

28. (with S. Favorov) *Holomorphic almost periodic functions*, Acta Appl. Math. **65** (2001), 217–235.

29. (with S. Favorov and L. Ronkin) *Almost periodic currents, divisors and holomorphic chains*, Israel Math. Conf. Proc. **15**, 2001, p.67–88.

30. *Zeros of holomorphic almost periodic mappings with independent components*, Complex Variables **44** (2001), no. 4, 299–316.

31. (with A. Aytuna and V. Zahariuta) *Widths asymptotics for a pair of Reinhardt domains*, Ann. Polon. Math. **78** (2002), 31–38.

32. *Total masses of mixed Monge-Ampère currents*, Michigan Math. J. **51** (2003), no. 1, 169–186.

33. (with R. Sigurdsson) *Green functions with analytic singularities*, Comptes Rendus Acad. Sci. Paris **340** (2005), Série I, 479–482.

34. (with R. Sigurdsson) *Green functions with singularities along complex spaces*, Internat. J. Math. **16** (2005), no. 4, 333–355.

35. *Relative types and extremal problems for plurisubharmonic functions*, Int. Math. Res. Not., 2006, Art. ID 76283, 26 pp.

36. *Analyticity and propagation of plurisubharmonic singularities*, Functional analysis and complex analysis, 137–143, Contemp. Math. **481**, Amer. Math. Soc., Providence, RI, 2009.

37. *A remark on amoebas in higher codimensions*, Analysis and Mathematical Physics, 465–471, Trends in Mathematics, Birkhäuser, 2009.

38. *Tropical analysis of plurisubharmonic singularities*, Tropical and Idempotent Mathematics, 305–315, Contemp. Math., **495**, Amer. Math. Soc., Providence, RI, 2009.

39. *Classical and new* log log-*theorems*, Expo. Math. **27** (2009), no. 4, 271–287.

40. *An extremal problem for generalized Lelong numbers*, Math. Z. **266** (2010), no. 2, 345 – 362.

41. (with V. Zakharyuta) *Special polyhedra for Reinhardt domains*, Comptes rendus – Mathématique **349** (2011), pp. 965-968.

42. (with J. Magnusson, R. Sigurdsson, and P. Thomas) *Limits of multipole pluricomplex Green functions*, Int. J. Math. **23** (2012), No. 6, 38 p.

43. *Extreme plurisubharmonic singularities*, Ann. Polon. Math. **106** (2012), 255–263.

44. *Multi-circled singularities, Lelong numbers, and integrability index*, J. Geom. Analysis **23** (2013), no. 4, 1976–1992.

45. *Analytic approximations of plurisubharmonic singularities*, Math. Z. **275** (2013), Issue 3, 1217–1238.

46. (with P. Thomas) *Powers of ideals and convergence of Green functions with colliding poles*, Int. Math. Res. Not., 2014, no. 5, 1253–1272.

47. *Extremal cases for the log canonical threshold*, C. R. Acad. Sci. Paris, Ser. I, **353** (2015), 21–24.

48. *Some problems on plurisubharmonic singularities*, Mat. Studii **45** (2016), no. 1, 104–108.

49. *Local geodesics for plurisubharmonic functions*, Math. Z. **287** (2017), no. 1, 73–83.

50. *A log canonical threshold test*, in: Analysis Meets Geometry. The Mikael Passare Memorial Volume. M. Andersson, J. Boman, C. Kiselman, P. Kurasov, R. Sigurdsson (Eds.) Trends in Mathematics, 361–368. Birkhäuser, 2017.

51. *Copolar convexity*, Ann. Polon. Math. **120** (2017), no. 1, 83–95.

52. (with D. Cordero-Erausquin) *Plurisubharmonic geodesics and interpolating sets*, Arch. Math. **113** (2019), no. 1, 63–72.

53. *A remark on symbolic powers*, Stud. Math. **248** (2019), no. 1, 111-116.

54. (with D. Kim) *Higher Lelong numbers and convex geometry*, J. Geom. Analysis **31** (2021), no. 1, 2525–2539.

55. *Interpolation of weighted extremal functions*, Arnold Math. J. **7** (2021), no. 3, 407–417.

56. *Rooftop envelopes and residual plurisubharmonic functions*, Ann. Polon. Math. **128** (2022), no. 2, 159–191.

57. (with A. Ulanovskii and I. Zlotnikov) *On 2-dimensional mobile sampling*, Appl. Comput. Harmon. Anal. **62** (2023), 1–23.

58. (with D. Kim) *Asymptotic multiplicities and Monge–Ampère masses (with an appendix by Sébastien Boucksom)*, Math. Ann. **385** (2023), no. 3-4, 1947–1972.

59. *Plurisubharmonic interpolation and plurisubharmonic geodesics*, Axioms **12** (2023).