LIST OF PUBLICATIONS

Eero Saksman

A1. REFEREED JOURNAL ARTICLES

1. (with Heikki Haario) *Simulated annealing process in general state space,* Adv. Appl. Prob. 23 (1991), 866–893.

2. (with Hans-Olav Tylli) *Weak compactness of multiplication operators on spaces of bounded linear operators,* Math. Scand. 70 (1992), 91–111.

3. (with Hans-Olav Tylli) *Compact and inessential perturbations of operators with closed range,* Integr. Equat. Oper. Th. 17 (1993), 404–416.

4. (with Hans-Olav Tylli) *Weak essential spectra of multiplication operators on spaces of bounded linear operators,* Math. Ann. 299 (1994), 209–309.

5. (with Heikki Haario and Pekka Oinas) *Perturbation solutions for film models,* Chemical Engineering Science 49 (1994), nro 11, 1789–1797.

6. (with Manuel Gonzalez and Hans-Olav Tylli) *Representing non-weakly compact operators,* Studia Math. 113 (1995), 265–282.

7. *Weak compactness and weak essential spectra of elementary operators,* Indiana Univ. Math. J. 44 (1995), 165–188.

8. (with Kari Astala and Lassi Päivärinta) *The finite Hilbert transform in weighted spaces,* Proc. Roy. Soc. Edinburgh Sect. A. 126 (1996), 1157–1167.

9. (with Päivi Mattila and Jari Taskinen) *Weighted spaces of harmonic and holomorphic fuctions: Sequence space representations and projective descriptions,* Proc. Math. Soc. of Edinburgh 40 (1997), 41–62.

10. (with Tuomo Nygrén and Markku Markkanen) *Ionospheric structures invisible in satellite radiotomography,* Radio Science 32 (1997), 605–616.

11. (with Jouni Luukainen) *Every complete doubling metric space carries a doubling measure,* Proc. Amer. Math. Soc. 126 (1998), 531–534.

12. (with Peide Liu and Hans-Olav Tylli) *Small composition operators on vector-valued spaces of analytic functions,* Pacific J. Math. 184 (1998), 295–309.

13. (with Hans-Olav Tylli) *Rigidity of commutators and elementary operators on Calkin algebras,* Israel J. Math.108 (1998), 217–236.

14. (with Hans-Olav Tylli) *The Apostol-Fialkow formula for elementary operators on Banach spaces,* J. Funct. Anal. 161 (1999), 1–26.

15. *Remarks on the nonexistence of doubling measures,* Ann. Acad. Sci. Fenn. Math. 24 (1999), 155–163.

16. (with Peide Liu and Hans-Olav Tylli) *Boundedness of the q-mean-square operator on vector-valued analytic martingales,* Canadian Math. Bull. 42 (1999), 221–230.

17. (with Heikki Haario and Johanna Tamminen) *Adaptive proposal distribution for random walk Metropolis algorithm,* Comput. Statist. 14 (1999), 375 – 395.

18. (with Hans-Olav Tylli) *Structure of subspaces of the compact operators having the Dunford-Pettis property,* Math. Z. 232 (1999), 411–425.

19. (with Peter Lindqvist and Juan Manfredi) *Superharmonicity of nonlinear ground states,* Revista Mat. Iberoamericana 16 (2000), 17–29.

20. (with Kari Astala and Tadeusz Iwaniec) *The Beltrami operators in plane,* Duke Math. J. 107 (2001), no. 1, 27–56.

21. (with Heikki Haario and Johanna Tamminen) *An adaptive Metropolis algorithm,* Bernoulli 7 (2001), 1–20.

22. (with Håkan Hedenmalm) *Carleson's convergence theorem for Dirichlet series,* Pacific J. Math. 208 (2003), 85–109.

23. (with Juha Kinnunen) *Regularity of the fractional maximal function,* Bull. London Math. Soc. 35 (2003), 529–535.

24. (with Heikki Haario, Marko Laine, Markku Lehtinen, and Johanna Tamminen) *Markov chain Monte Carlo methods for high dimensional inversion in remote sensing,* J. R. Stat. Soc. Ser. B Stat. Methodol. 66 (2004), no. 3, 591–607 (read before the society XI/2003).

25. (with Pekka Nieminen) *Boundary correspondence of Nevanlinna counting functions for self-maps of the unit disc,* Trans. Amer. Math. Soc. 356 (2004), no. 8, 3167–3187.

26. (with Pekka Nieminen) *On compactness of the difference of composition operators,* J. Math. Anal. Appl. 298 (2004), no. 2, 501–522.

27. (with Heikki Haario and Johanna Tamminen) *Componentwise adaptation for high dimensional MCMC.* Comput. Statist. 20 (2005), 265–273.

28. (with Mikael Lindström and Hans-Olav Tylli) *Strictly singular and cosingular multiplication operators.* Canad. J. Math. 57 (2005), 1249–1278.

29. (with Shangquan Bo) *On the complete continuity property in Banach spaces*, Rocky Mountain J. Math. 36 (2006), no. 5, 1427–1435.

30. (with Heikki Haario, Antonietta Mira, and Johanna Tamminen) *DRAM: Efficient adaptive MCMC,* Statistics and Computing 16 (2006), 339–354.

31. (with Petri Juutinen) *Hamilton-Jacobi flows and characterization of solutions of Aronsson equations*, Ann. Sc. Norm. Super. Pisa Cl. Sci. (5) 6 (2007), 1–13.

32. (with Mario Bonk and Juha Heinonen) *Logarithmic potentials, quasiconformal flows, and Q-curvature*, Duke Math. J. 142 (2008), 197–239.

33. (with Matti Lassas and Lassi Päivärinta) *Inverse scattering problem for a two-dimensional random potential,* Comm. Math. Phys. (2008), 669–703.

34. (with Pekka Koskela) *Pointwise characterizations of Hardy-Sobolev functions*, Math. Research Lett. 15 (2008), 727-744.

35. (with Hans-Olav Tylli) *New examples of weakly compact approximation in Banach spaces*, Ann. Acad. Sci. Fenn. Math. 33 (2008), 429-438.

36. (with Eva A. Gallardo-Guti/'errez, Maria J. Gonzaléz, and Pekka Nieminen) *On the connected component of compact composition operators on the Hardy space,* Adv. Math. 219 (2008), 986–1001.

37. (with Matti Lassas and Samuli Siltanen) *Discretization invariant Bayesian inversion and Besov space priors,* Inverse Probl. Imaging. 2 (2009), 87-122.

38. (with Kristian Seip) *Integral means and boundary limits of Dirichlet series*, Bull. London Math. Soc. 41 (2009), 411–422.

39. (with Ilkka Norros) *Local independence of fractional Brownian motion.* Stochastic Process. Appl. 119 (2009), 3155–3172.

40. (with Teresa Radice and Gabriella Zecca) *Isomorphisms of Royden type algebras over S^1*, Boll.Unionen Mat. Ital. Serie IX (3) (2009), 719–730.

41. (with Stefan Geiss and Stephen Montgomery-Smith) *On singular integrals and martingale transforms*, Trans. Amer. Math. Soc. 362 (2010), 553–575.

42. (with Kari Astala, James Gill and Steffen Rohde) *Optimal regularity for planar mappings of finite distortion,* Ann. Inst. H. Poincaré Anal. Non Linéaire 27 (2010), 1–19.

43. (with Kari Astala, Peter Jones, and Antti Kupiainen) *Random curves by conformal welding*, C.R. Acad. Sci. Paris, Ser. I. 348 (2010), 257–262.

44. (with Matti Vihola) *On the ergodicity of the Adaptive Metropolis on unbounded domains.* Ann. of Appl. Prob. 20 (2010), 2178–2203.

45. (with Kari Astala, Peter Jones and Antti Kupiainen) *Random conformal weldings,* Acta Math. 207 (2011), 203–254.

46. (with Jan-Fredrik Olsen) *On the boundary behavior of Hardy spaces of Dirichlet series.* Journal für die Reine und Angewandte Mathematik (Crelles Journal) 663 (2012), 33–66.

47. (with Kari Astala, T. Iwaniec and Istvan Prause) *Burkholder Integrals, Morrey's Problem and Quasiconformal Mappings* J. Amer. Math. Soc. 25 (2012), 507–531.

48. (with David Drasin) *Optimal growth of entire functions frequently hypercyclic with respect to the differentiation operator,* J. Funct. Anal. 263 (2012), 3674–3688.

49. (with Pekka Nieminen, Jussi Laitila and Hans-Olav Tylli) *Compact and weakly compact composition operators on BMOA*, Complex Anal. and Oper. Theory 7 (2013), 163–181.

50. (with Hannes Luiro and Mikko Parviainen) *Harnack's inequality for p-harmonic functions via stochastic games*, to appear in Comm. Partial Differential Equations 38 (2013), 1985–2003.

51. (with Julien Barral, Antti Kupiainen, Miika Nikula and Christian Webb) *Critical Mandelbrot Cascades,* to appear in Comm. Math. Phys. 325 (2014), 685–711.

52. (with Hannes Luiro and Mikko Parviainen) *On the existence and uniqueness of p-harmonious functions,* Differential Integral Equations 27 (2014), 201–216.

53. (with Herbert Koch, Pekka Koskela and Tomas Soto) *Bounded compositions on scaling invariant Besov spaces,* J. Funct. Anal. 266 (2014), no. 5, 2765–2788.

54. (with Alexandru Aleman and Jan-Fredrik Olsen) *Fourier multipliers for Hardy spaces of Dirichlet series,* to appear in Int. Math. Res. Not. IMRN 16 (2014), 4368–4378.

55. (with Kari Astala, Tadeusz Iwaniec and Istvan Prause), *Bilipschitz and quasiconformal rotation, stretching and multifractal spectra,* Publ. Math. Inst. Hautes Études Sci. 121 (2015), 113–154.

56. (with Julien Barral, Antti Kupiainen, Miika Nikula and Christian Webb) *Basic properties of critical lognormal chaos,* Ann. Probab. 43 (2015), 2205–2249.

57. (with Kari Astala, Tadeusz Iwaniec and Istvan Prause), *A hunt for sharp L^p-estimates and rank-one convex variational integrals,* Filomat 29 (2015),245–261.

58. (with Mario Bonk) *Hyperbolic fillings and Sobolev spaces*, to appear in Journal für die Reine und Angewandte Mathematik.

59. (with David Kalaj) *Quasiconformal mappings with controlled Laplacian,* to appear in J. Analyse. Math.

A2. REVIEW ARTICLES

60. (with Hans-Olav Tylli) *Multiplications and elementary operators in the Banach space setting.* In: Methods in Banach space theory. (Proc. V Conference on Banach spaces, Caceres, September 13-18, 2004; J.F.M. Castillo and W.B. Johnson, eds.) London Mathematical Society Lecture Note Series 337 (Cambridge University Press, 2006), pp. 253-292.

61. *An elementary introduction to Clark measures.* In: Topics in complex analysis and Operator theory, 85–136. Proceedings of the Winter School on Complex Analysis and Operator Theory held in Málaga, February 5–9, 2006. Edited by Daniel Girela Álvarez and Cristóbal González Enríquez. Univ. Málaga, Málaga 2007.

A4. CONFERENCE PROCEEDINGS

62. (with Heikki Haario) *Weak convergence of the simulated annealing process in general state space,* Ann. Acad. Sci. Fennicæ Series A. I. Math. 17 (1992), 39–50.

63. *On elementary operators on Calkin algebras,* Seminaire d'Initiation a l'Analyse n. 120, 36eme Annee : 1996/1997, n. 20, 7 p. Publ. Math. Univ. Pierre et Marie Curie, Univ. Paris VI.

64. (with Matti Lassas and Lassi Päivärinta) *Inverse problem for a random potential,* in Partial differential equations and inverse problems, Contemp. Math., 362, Amer. Math. Soc., 2004, 277-288.

65. (with M. Fontes) *Optimal results for the two dimensional Navier-Stokes equations with lower regularity on the data.* In Actes des journées mathématiques á la mémoire de Jean Leray - (Nantes, 2002) Laurent Guillopé - Didier Robert (Éd.) Séminaires et Congrés 9, SMF, 2004,

66. (with Mario Bonk and Juha Heinonen) *The quasiconformal Jacobian problem,* in Proceedings of the Ahlfors-Bers conference 2001 Contemporary Mathematics 355 (2004), 77–96.

67. (with Carl Sundberg) *Comparing topologies on the space of composition operators,* in Recent advances in operator related Fuction Theory, Contemp. Math., 393, Amer. Math. Soc., 2006, 277-288.

G4. DOCTORAL DISSERTATION

68. *Weak compactness and weak essential spectra of elementary operators,* 11 pp. Yliopistopaino (1994). [Summary of my dissertation]

O. OTHER PUBLICATIONS (NOT RELATED TO OWN RESEARCH)

Pedagogical publications

69. (with Aapo Halko and Petri Ola) *Differentiaali- ja integraalilaskenta 1.1, Väli- ja loppukoetehtäviä ratkaisuineen vuosilta 1984 – 87*, Limes ry, Helsinki 1988.

70. (with Aapo Halko and Petri Ola) *Differentiaali- ja integraalilaskenta 1.2, Väli- ja loppukoetehtäviä ratkaisuineen vuosilta 1984 – 87*, Limes ry, Helsinki 1988.

71. (with Matti Lehtinen) *Several articles 1988–1992* in 'Dimensio' on the the problems in mathematical olympiads.

Articles in popular scientific journals

72. *Moniulotteinen röntgenkuvantaja,* (in Finnish) Arkhimedes 5 (1999), 15–17.

73. *Matemaattinen neuvonantaja ja suurvisiiri,* (in Finnish) Arkhimedes 5 (1999), 20–21.

74. *Arvojenjakautumisteoriasta riskien hallintaan,* (in Finnish) Arkhimedes 5 (1999), 28–29.

75. *Eväät ongelmanratkaisuun,* (in Finnish) Yliopistolehti 10/2000 (2000), 10–11.

76. *Kolmannen asteen yhtälöä ratkaisemassa,* (in Finnish) Matematiikkalehti Solmu 1/2000-2001 (2000), 5–12.

77. *Uusiutuvat kvasikonformikuvaukset,* (in Finnish) Arkhimedes 2-3 (2013), 30–35.

P. PREPRINTS AND MANUSCRIPTS

78. *Local mapping properties of the Hilbert transform.* Preprint.

79. (with Daniel Aalto and Martin Reimann) *Neuronal calculus for the auditory pathway,* preprint (arXiv:1502.00399).

80. (with Mario Bonk and Tomas Soto) *Triebel-Lizorkin spaces via hyperbolic fillings,* preprint (arXiv:1411.5906).

81. (with Janne Junnila) *The uniqueness of Gaussian chaos revisited,* presprint (arXiv:1506.05099).

82. (with Marti Prats) *A T(1) theorem for fractional Sobolev spaces on domains ,* preprint (arXiv:1507.03935)

83. (with Alexandru Aleman and Jan-Fredrik Olsen) *Fatou and brother Riesz theorems in the infinite-dimensional polydisc,* preprint (arXiv:1512.01509).

84. (with Kristian Seip) *Some open questions in analysis for Dirichlet series,* preprint (arXiv:1601.01616).

85. (with Kari Astala, Steffen Rohde, and Terence Tao) *Scaling limits of random quasi-conformal maps.* Manuscript in preparation.