

The list of publications of Juha Kinnunen

Submitted manuscripts

1. J. Kinnunen, R. Korte, N. Shanmugalingam and H. Tuominen, *Pointwise properties of functions of bounded variation in metric spaces* (2011).

Articles in international refereed journals

2. T. Heikkinen, J. Kinnunen, J. Nuutinen and H. Tuominen, *Mapping properties of the discrete fractional maximal function in metric measure spaces*, *Kyoto J. Math.* (to appear).
3. J. Kinnunen, N. Marola, M. Miranda and F. Paronetto, *Parabolic variational problems and regularity in metric spaces*, *Adv. Differential Equations* (to appear).
4. J. Kinnunen, R. Korte, T. Kuusi and M. Parviainen, *Nonlinear parabolic capacity and polar sets of superparabolic functions*, *Math. Ann.* (to appear).
5. J. Kinnunen, R. Korte, A. Lorent and N. Shanmugalingam, *Regularity of sets with quasiminimal boundary surfaces in metric spaces*, *J. Geom. Anal.* (to appear).
6. B. Bojarski, L. Ihnatsyeva and J. Kinnunen, *How to recognize polynomials in higher order Sobolev spaces*, *Math. Scand.* (to appear).
7. J. Kinnunen, R. Korte, N. Shanmugalingam and H. Tuominen, *A characterization of Newtonian functions with zero boundary values*, *Calc. Var. Partial Differential Equations* **43** (2012), 507-528.
8. K. Ishige and J. Kinnunen, *Initial trace for a doubly nonlinear parabolic equation*, *J. Evol. Eq.* **10** (2011), 943-957.
9. D. Aalto and J. Kinnunen, *The discrete maximal operator in metric spaces*, *J. Anal. Math.* **111** (2010), 369-390.
10. J. Kinnunen, R. Korte, N. Shanmugalingam and H. Tuominen, *The De Giorgi measure and an obstacle problem related to minimal surfaces in metric spaces*, *J. Math. Pures Appl.* **93** (2010), 599-622.
11. H. Hakkarainen and J. Kinnunen, *The BV-capacity in metric spaces*, *Manuscripta Math.* **132** (2010), 51-73.
12. J. Kinnunen, M. Kotilainen and V. Latvala, *Hardy-Littlewood type gradient estimates for quasiminimizers*, *Boll. Un. Mat. Ital. (9) III* (2010), 125-136.
13. J. Kinnunen and M. Parviainen, *Stability for degenerate parabolic equations*, *Adv. Calc. Var.* **3** (2010), 29-48.
14. J. Kinnunen, T. Lukkari and M. Parviainen, *An existence result for superparabolic functions*, *J. Funct. Anal.* **258** (2010), 713-728.
15. M. Ekonen, J. Kinnunen, N. Marola and C. Sbordone, *On Beckenbach-Rado type integral inequalities*, *Ricerche Mat.* **58** (2009), 43-61.
16. J. Kinnunen and R. Korte, *Characterizations of Sobolev inequalities on metric spaces*, *J. Math. Anal. Appl.* **344** (2008), 1093-1104.
17. J. Kinnunen, R. Korte, N. Shanmugalingam and H. Tuominen, *Lebesgue points and capacities via boxing inequality in metric spaces*, *Indiana Univ. Math. J.* **57** (2008), 401-430.
18. J. Kinnunen and P. Lindqvist, *Definition and properties of supersolutions to the porous medium equation*, *J. reine angew. Math.* **618** (2008), 135-168.
19. J. Kinnunen and H. Tuominen, *Pointwise behaviour of Sobolev functions*, *Math. Z.*, **257** (2007), 613-630.
20. J. Kinnunen, N. Marola and O. Martio, *Harnack's principle for quasiminimizers*, *Ricerche Mat.* **56** (2007), 73-88.
21. P. Harjulehto, J. Kinnunen and K. Tuhkanen, *Hölder quasicontinuity in variable exponent Sobolev spaces*, *J. Ineq. Appl.* (2007), Article ID 32324, 18 pages. Doi:10.1155/2007/32324.

22. J. Kinnunen and T. Kuusi, Local behaviour of solutions of doubly nonlinear parabolic equations, *Math. Ann.* **337** (2007), 705-728.
23. P. Harjulehto, J. Kinnunen and T. Lukkari, *Unbounded supersolutions of nonlinear equations with nonstandard growth conditions*, Bound. Value Probl. (2007), Article ID 48348, 20 pages. Doi:10.1155/2007/48348.
24. J. Kinnunen and N. Shanmugalingam, *Polar sets on metric spaces*, Trans. Amer. Math. Soc. **358** (2006), 11-37.
25. J. Kinnunen and P. Lindqvist, *Pointwise behaviour of semicontinuous supersolutions to a quasilinear parabolic equation*, Ann. Mat. Pura Appl. (4) **185** (2006), 411-435.
26. J. Kinnunen and P. Lindqvist, *Summability of semicontinuous supersolutions to a quasilinear parabolic equation*, Ann. Sc. Norm. Super. Pisa Cl. Sci. (5) **4** (2005), 59-78.
27. P. Harjulehto and J. Kinnunen, *Differentiation bases for Sobolev functions on metric spaces*, Publ. Mat. **48** (2004), 381-395.
28. J. Kinnunen and O. Martio, *Sobolev space properties of superharmonic functions on metric spaces*, Results Math. **44** (2003), 114-129.
29. J. Kinnunen and O. Martio, *Potential theory of quasiminimizers*, Ann. Acad. Sci. Fenn. Math. **28** (2003), 459-490.
30. J. Kinnunen and E. Saksman, *Regularity of the fractional maximal function*, Bull. London Math. Soc. **35** (2003), 529-535.
31. J. Kinnunen and O. Martio, *Nonlinear potential theory on metric spaces*, Illinois J. Math. **46** (2002), 857-883.
32. J. Kinnunen and V. Latvala, *Lebesgue points for Sobolev functions on metric spaces*, Rev. Mat. Iberoamericana **18** (2002), 685-700.
33. J. Kinnunen and J.L. Lewis, *Very weak solutions of parabolic systems of p -Laplacian type*, Ark. Mat. **40** (2002), 105-132.
34. J. Kinnunen and N. Shanmugalingam, *Regularity of quasi-minimizers on metric spaces*, Manuscripta Math. **105** (2001), 401-423.
35. J. Kinnunen and S. Zhou, *A boundary estimate for nonlinear equations with discontinuous coefficients*, Differential and Integral Equations **14** (2001), 475-492.
36. J. Kinnunen and J.L. Lewis, *Higher integrability for parabolic systems of p -Laplacian type*, Duke Math. J. **102** (2000), 253-271.
37. T. Kilpeläinen, J. Kinnunen and O. Martio, *Sobolev spaces with zero boundary values on metric spaces*, Potential Anal. **12** (2000), 233-247.
38. J. Kinnunen and S. Zhou, *A local estimate for nonlinear equations with discontinuous coefficients*, Comm. Partial Differential Equations **24** (1999), 2043-2068.
39. P. Hajlasz and J. Kinnunen, *Hölder quasicontinuity of Sobolev functions on metric spaces*, Rev. Mat. Iberoamericana, **14** (1998), 601-622.
40. J. Kinnunen and P. Lindqvist, *The derivative of the maximal function*, J. reine angew. Math. **503** (1998), 161-167.
41. L. Grafakos and J. Kinnunen, *Sharp inequalities for maximal functions associated with general measures*, Proc. Roy. Soc. Edinburgh Sect. A. **128A** (1998), 717-723.
42. J. Kinnunen, *A stability result on Muckenhoupt's weights*, Publ. Mat. **42** (1998), 153-163.
43. J. Kinnunen and S. Zhou, *A note on very weak p -harmonic mappings*, Electron. J. Differential Equations **1997** (1997), No. 25, 1-4.
44. J. Kinnunen and O. Martio, *Hardy's inequalities for Sobolev functions*, Math. Research Letters **4** (1997), 489-500.
45. J. Kinnunen, *The Hardy-Littlewood maximal function of a Sobolev function*, Israel J. Math. **100** (1997), 117-124.
46. J. Kinnunen and O. Martio, *Sobolev capacity on metric spaces*, Ann. Acad. Sci. Fenn. Math. **21** (1996), 367-388.
47. J. Kinnunen, *Sharp results on reverse Hölder inequalities*, Ann. Acad. Sci. Fenn. Ser. A I Math. Dissertationes **95** (1994), 1-34.
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49. J. Kinnunen, *Regularity for a doubly nonlinear equation*, RIMS Kokyuroku, Research Institute of Mathematical Sciences, Kyoto University (to appear).
50. J. Kinnunen and R. Korte, *Characterizations for the Hardy inequality*, Around the Research of Vladimir Maz'ya, International Mathematical Series, Vol 11 Laptev Ari (Ed.), 239-254, 2010.
51. D. Aalto and J. Kinnunen, *Maximal functions in Sobolev spaces*, Sobolev Spaces in Mathematics I, International Mathematical Series, Vol. 8 Maz'ya, Vladimir (Ed.), 25-68, Springer, 2008.
52. J. Kinnunen, *On the definition and properties of superparabolic functions*, RIMS Kokyuroku 1553, 33-43, Potential Theory and Related Fields, Research Institute of Mathematical Sciences, Kyoto University, 2008.
53. J. Kinnunen and V. Latvala, *Fine regularity of superharmonic functions on metric spaces*, Future Trends in the Geometric Function Theory 157-167, Rep. Univ. Jyväskylä Dep. Math. Stat., 92, Univ. Jyväskylä, Jyväskylä, 2003.
54. J. Kinnunen, *Minimal, maximal and reverse Hölder inequalities*, Papers on analysis, 225-247, Rep. Univ. Jyväskylä Dep. Math. Stat., 83, Univ. Jyväskylä, Jyväskylä, 2001.
55. J. Kinnunen and O. Martio, *Maximal operator and superharmonicity*, Function spaces, differential operators and nonlinear analysis (Pudasjärvi, 1999), 157-169, Acad. Sci. Czech Repub., Prague, 2000.
56. J. Kinnunen and O. Martio, *Choquet property for the Sobolev capacity in metric spaces*, Proceedings on Analysis and Geometry (Russian) (Novosibirsk Akademgorodok, 1999), 285-290, Izdat. Ross. Akad. Nauk Sib. Otd. Inst. Mat., Novosibirsk, 2000.