

list of publications, Peter Grandits

1. P. Grandits, C. Schmeiser, A mixed Boundary Value Problem for flow in strongly anisotropic media, *Applicable Analysis*, Vol. 35(1990),153-173.
2. P. Grandits, C- Diskrepanz von Flächen im Raum, *Sb. d. Österr. Akad. d. Wiss. Wien, math.- nat. Kl., Abt. II, Bd. 199, 1.-3. Heft*(1990),59-81.
3. P. Grandits, No-go theorems for nonsupersymmetric finite quantum field theories, *Mod. Phys. Letters A*, Vol. 9, No. 12(1994) 1093-1103.
4. P. Grandits, Towards a classification of finite field theories, *Mod. Phys. Letters A*, *Mod. Phys. Letters A*, Vol. 9, No. 27(1994),2555-2567.
5. P. Grandits, On nonsupersymmetric finite quantum field theories, *Int. Journ. of Mod. Phys. A*, Vol. 10, No. 10(1995)1507-1528.
6. P. Grandits, On a conjecture of Kazamaki, *Seminaire de Probabilites XXX*,1996, 357-360.
7. P. Grandits and L. Krawczyk, Closedness of some spaces of stochastic integrals, *Seminaire de Probabilites XXXII*, 1998, 73-85.
8. P. Grandits, The p-optimal martingale measure and its asymptotic relation with the minimal entropy martingale measure, *Bernoulli* 5(2), 1999, 225-247.
9. P. Grandits, On martingale measures for stochastic processes with independent increments, *Theory of Probability and its Applications* 44, (1999) 87-100.
10. P. Grandits, Some remarks on L^∞ , H^∞ and BMO, *Seminaire de Probabilites XXXIII*, 1999, 342-348.
11. P. Grandits and N. Falkner, Embedding in Brownian motion with drift, *Stochastic Processes and their Applications* 85 (2000), 249-254.
12. P. Grandits and W. Schachinger, Leland's approach to option pricing: The evolution of a discontinuity, *Mathematical Finance* Vol. 11, No.3 (2001), 347-355.
13. P. Grandits, Hedging under transaction costs and a nonlinear Fokker-Planck PDE, *SIAM Journal on Applied Mathematics* 62, no.2, (2001), 541-

562.

14. P. Grandits and Thorsten Rheinlaender, On the minimal entropy martingale measure, *Annals of Probability* 30, no.3, (2002), 1003-1038.

15. F. Delbaen, P. Grandits, T. Rheinlaender, D. Samperi, M. Schweizer and C. Stricker, Exponential Hedging and Entropic Penalties, *Mathematical Finance* 12, no.2 (2002), 99-123.

16. J. Gaier and P. Grandits, Ruin Probabilities in the presence of regularly varying tails and optimal investment, *Insurance: Mathematics and Economics* 30 (2002),211-217.

17. J. Gaier, P. Grandits and W. Schachermayer, Asymptotic ruin probabilities and optimal investment, *Annals of Applied Probability* Vol. 13, no.3 (2003), 1054-1076.

18. J. Gaier and P. Grandits, Ruin probabilities and investment under interest force in the presence of regularly varying tails, *Scand. Act. Journal* 2004, no. 4, 256-278.

19. P. Grandits, An analogue of the Cramer-Lundberg approximation in the optimal investment case, *Applied Math. and Optimization* 50, no.1, (2004), 1-20.

20. P. Grandits, A Karamata type theorem and ruin probabilities for an insurer investing proportionally in the stock market, *Insurance: Mathematics and Economics* 34, no.2 (2004), 297-305.

21. P. Grandits, Minimal Ruin probabilities and investment under interest force for a class of subexponential distributions, *Scand. Act. Journal* 2005, no. 6, 401-416.

22. P. Grandits and C. Summer, Risk averse asymptotics and the optional decomposition, *Theory of probability and its applications* 51, no.2 (2006), 409-418.

23. P. Grandits, F. Hubalek, W. Schachermayer and M. Zigo, Optimal expected utility of dividend payments in a Brownian risk model, *Scandinavian Actuarial Journal*, no.2 (2007), 73-107.

24. P. Grandits, A regularity theorem for a Volterra integral equation of the third kind, *Integral Equation and its Applications*, Vol. 20, no.4, (2008), 507-526.

25. P. Grandits, R. Kainhofer and G. Temnov, On the impact of hidden trends for a compound poisson model with Pareto-type claims, *Int. Journal of theoretical and applied finance*, Vol.13, no.6 (2010),959-978.
26. P. Grandits and G. Temnov, A global consistency result for the two-dimensional Pareto distribution in the presence of mis-specified inflation, *Finance and Stochastics* Vol 14, no. 4 (2010),569-591.
27. P. Grandits and S. Thonhauser, Risk averse asymptotics in a Black-Scholes market on a finite time horizon, *Math. Meth. Oper. Res.*, 74, (2011), 21-40
28. P. Grandits, Optimal consumption in a Brownian model with absorption and finite time horizon, *Applied Math. and Optimization* (2013)67, 197-241.
29. J. Eisenberg, P. Grandits and S. Thonhauser, Optimal consumption under deterministic income, to appear in *Journal of Optimization Theory and Applications*, Volume 160, Issue 1, 255-279 (2014).
30. P. Grandits, Existence and asymptotic behavior of an optimal barrier for an optimal consumption problem in a Brownian Model with absorption and finite time horizon, *Applied Math. and Optimization* (2014)69,233-271.
31. P. Grandits, An optimal consumption problem in finite time with a constraint on the ruin probability, *Finance and Stochastics*, (2015), no. 4, 791-847.
32. P. Grandits, Optimal consumption until ruin for an endowment described by an autonomous ODE for an infinite time horizon, *Mathematics of Operations Research*, (2016), no. 3, 953-968.
33. P. Grandits, A two-dimensional dividend problem for collaborating companies and an optimal stopping problem, *Scand. Actuar. J.*, (2019), no. 1, 80-96.
34. P. Grandits, Some notes on Sonine-Gegenbauer integrals, *Integral Transforms Spec. Funct.* (2019), 30, no. 2, 128-137.
35. P. Grandits, A ruin problem for a two-dimensional Brownian motion with controllable drift in the positive quadrant, *Theory of Probability and its Applications* (2019),64, no. 4, 811-823.
36. P. Grandits, On the gain of collaboration in a two-dimensional ruin problem, *Eur. Actuar. J.* 9 (2019), no. 2, 635-644.

37. P. Grandits, R. Kovacevic and V. Veliov, Optimal control and the value of information for a stochastic epidemiological SIS-model, *Journal of Mathematical Analysis and Applications*, (2019), 476, no. 2, 665-695.
38. P. Grandits, Asymptotics of the hitting probability for a small sphere and a two dimensional Brownian motion with discontinuous anisotropic drift, *Bernoulli* (2021), 27, no. 2, 853-865.
39. P. Grandits and M. Klein, Ruin probability in a two-dimensional model with correlated Brownian motions, *Scand. Actuar. J.* (2021), no. 5, 362-379.
40. P. Grandits, An Alexandrov-Bakelman-Pucci estimate for an anisotropic Laplacian with positive drift in unbounded domains, *Journal of Differential Equations* 303 (2021), 183-213.
41. P. Grandits, Some global topological properties of a free boundary problem appearing in a two dimensional controlled ruin problem, *Mathematics of Control, Signals and Systems* (2023), 35, 927-949.
42. P. Grandits and Maike Klein, Different topological solution structures in a two-dimensional controlled ruin problem depending on the optimization criterion, to appear in *Stochastics*, online version already available at <https://doi.org/10.1080/17442508.2023.2284194>.
43. P. Grandits, A singularly perturbed ruin problem for a two dimensional Brownian motion in the positive quadrant, to appear in *Journal of Applied Probability*.
44. P. Grandits, The limiting case in the Sobolev embedding theorem and radial-symmetric functions, to appear in *Glasnik Matematički. Serija III*.

(Oktober 2024)