

## Submitted for Publication in Refereed Journal<sup>1</sup>

1. Sakhanenko, L.. (2009) Global rate optimality in a model for Diffusion Tensor Imaging. Accepted by *Theory of Probability and Applications*, 17 pages.

2. Koltchinskii, V., Sakhanenko, L.. (2009) Asymptotics of Statistical Estimators of Integral Curves. To appear in *High Dimensional Probability V*. Peligrad (Eds), 12 pages.

3. Sakhanenko, L.. (2009) Lower bounds for accuracy of estimation in Diffusion Tensor Imaging. To appear in *Theory of Probability and Applications*, 54, 15 pages. [2008 Impact factor 0.28?]

## Publications in Refereed Journals

4. Sakhanenko, L.. (2008) Testing for Ellipsoidal Symmetry: A comparison study. *Computational Statistics & Data Analysis*, 53, 565-581. [Impact factor 1.029]

5. Koltchinskii, V., Sakhanenko, L., Cai, S.. (2007) Integral Curves of Noisy Vector Fields and Statistical Problems in Diffusion Tensor Imaging: Nonparametric Kernel Estimation and Hypotheses Testing. *Annals of Statistics*, Vol. 35, No. 4, 1576-1607. [Impact factor 1.944, cited by 4]

6. Koul, H., Sakhanenko, L.. (2005) Goodness-of-fit testing in regression: A finite sample comparison of bootstrap methodology and Khmaladze transformation. *Statistics & Probability Letters* 74, 290-302. [Impact factor 0.3, cited by 2]

7. Giné, E., Koltchinskii, V., Sakhanenko L.. (2004) Kernel Density Estimators: Convergence in distribution for weighted sup-norms. *Probability Theory and Related Fields*, vol. 130, No. 2, 167-198. [Impact factor 1.164, cited by 2]

8. Giné, E., Koltchinskii, V., Sakhanenko, L.. (2003) Convergence in distribution of Self-Normalized Sup-Norms of Kernel Density Estimators. *High Dimensional Probability III*. Hoffmann-Jorgensen, Marcus and Wellner (Eds), Birkhauser, Boston, pp. 241-253. [Cited by 2]

9. Borisov, I., Sakhanenko, L.. (2001) The central limit theorem for generalized von Mises statistics with degenerate kernels. (Russian) *Mat. Tr.* 4, no. 1, 3-17.

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<sup>1</sup>Updated August 24, 2009

10. Koltchinskii, V., Sakhanenko, L.. (2000) Testing for ellipsoidal symmetry of a multivariate distribution. *High Dimensional Probability II*. E. Giné, D. Mason and J. Wellner (Eds) Progress in probability, Birkhäuser, Boston, pp. 493-510. [Cited by 3]

11. Borisov I., Sakhanenko L.. (2000) The Central Limit Theorem for generalized canonical von Mises statistics. *Siberian Advances in Mathematics* vol. 10, No. 4, 1-14. [Cited by 1]

**Papers in progress.**

12. Sakhanenko, L. (2009) Multidimensional Kernel Density Estimators: Convergence in distribution for weighted sup-norms.

13. Sakhanenko, L. (2009) Local estimation model for integral curves in Diffusion Tensor Imaging.

14. Sakhanenko, L. (2009) Testing for group symmetry of a multivariate distribution.