Sasha Sodin - publications

June 13, 2013

2006

1. (joint with Sh. Artstein-Avidan, O. Friedland and V. Milman) Polynomial bounds for large Bernoulli sections of ℓ_1^N, Isr. Journal of Math., Vol. 156 (2006), pp. 141-156, arXiv:math/0601369

2007

2. Tail-sensitive Gaussian asymptotics for marginals of concentrated measures in high dimension, Geometric aspects of functional analysis (Israel Seminar 2004 – 2005), pp. 271–295, Lecture Notes in Math., 1910, Springer, Berlin, 2007, arXiv:math/0501382

3. (joint with N. Alon, I. Benjamini and E. Lubetzky) Non-backtracking random walks mix faster, Commun. Contemp. Math., Vol. 9, No. 4 (August 2007), arXiv:math/0610550

4. Random matrices, non-backtracking walks, and orthogonal polynomials, J. Math. Phys., vol. 48 (2007), no. 12, 123503, arXiv:math-ph/0703043

5. (joint with Omer Friedland) An extension of the Bourgain–Lindenstrauss–Milman inequality, J. Funct. Anal., 251 (2007), 492–497, arXiv:0706.2483

6. (joint with Omer Friedland) Bounds on the concentration function in terms of Diophantine approximation, C. R. Math. Acad. Sci. Paris 345 (2007), no. 9, 513–518, arXiv:0706.2679

2008

7. An isoperimetric inequality on the ℓ_p balls, Annales de l'Institut Henri Poincaré (B): Probability and Statistics, Vol. 44, no. 2 (2008), 362-373, arXiv:math/0607398

8. (joint with Shachar Lovett) Almost Euclidean sections of the N-dimensional cross-polytope using O(N) random bits, Commun. Contemp. Math., Vol. 10, No. 4 (2008), pp. 477–489, arXiv:math/0701102

9. (joint with Emanuel Milman) An isoperimetric inequality for uniformly log-concave measures and uniformly convex bodies, J. Funct. Anal., 254 (2008), pp 1235-1268, arXiv:math/0703857

2009

10. The Tracy–Widom law for some sparse random matrices, J. Stat. Phys., Vol. 136, Issue 5 (2009), pp. 834–841, arXiv:0903.4295

2010

11. (joint with Ohad N. Feldheim) A universality result for the smallest eigenvalues of certain sample covariance matrices, Geom. Funct. Anal. 20-1 (2010), 88-123, arXiv:0812.1961

12. The spectral edge of some random band matrices, Ann. of Math. 172 (2010), No. 3, 2223-2251, arXiv:0906.4047

2011

13. (joint with Ohad N. Feldheim) One more proof of the Erdős–Turán inequality, and an error estimate in Wigner's law, in Concentration, Functional Inequalities and Isoperimetry, Contemporary Mathematics, vol. 545, Amer. Math. Soc., Providence, RI, 2011, pp. 69–75, arXiv:0901.1620

14. (joint with I. Benjamini and O. Schramm) Poisson asymptotics for random projections of points on a high-dimensional sphere, Isr. J. Math, vol. 181 (2011), no. 1, pp. 381–386, arXiv:0903.0107

15. (joint with Mira Shamis) On the Measure of the Absolutely Continuous Spectrum for Jacobi Matrices, J. Approx. Theory 163 (2011), pp.491-504, arXiv:1007.5033

16. An estimate for the average spectral measure of random band matrices, J. Stat. Phys., Vol. 144, Issue 1 (2011), pp. 46–59, arXiv:1101.4413

2012

17. (joint with Bo'az Klartag) Variations on the Berry-Esseen theorem, Theory Probab. Appl., vol. 56 (2012), pp. 403–419, arXiv:1002.3970

preprints

18. (joint with Alexander Elgart and Mira Shamis) Localisation for non-monotone Schroedinger operators, *to appear in* J. Eur. Math. Soc. (JEMS), arXiv:1201.2211

19. Positive temperature versions of two theorems on first-passage percolation, arXiv:1301.7040

other

i. (joint with Igal Kotzer, Smadar Har-Nevo, and Simon Litsyn) An Analytical Approach to the Calculation of EVM in Clipped OFDM Signals, 2010 IEEE 26th Convention of Electrical and Electronics Engineers in Israel (IEEEI), pp. 193–197

ii. (joint with Igal Kotzer, Smadar Har-Nevo, and Simon Litsyn) An Analytical Approach to the Calculation of EVM in Clipped Multi-Carrier Signals, IEEE Trans. Comm. 60 (2012), no. 5, pp. 1371–1380

iii. (joint with Igal Kotzer, Smadar Har-Nevo, and Simon Litsyn) On the EVM of sequences, 2011 IEEE International Symposium on Information Theory Proceedings (ISIT), pp. 484–488

iv. (joint with Igal Kotzer, Smadar Har-Nevo, and Simon Litsyn) A Model for OFDM Signals with Applications, *to appear in* Eur. Trans. Telecomm.