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PUBLICATION LIST

In Preparation

- Dong Wang, The largest eigenvalue of real symmetric, Hermitian and Hermitian self-dual random matrix models with rank one external source, part II.

Papers and Preprints

21. Dang-Zheng Liu, Dong Wang and Yanhui Wang, Lyapunov exponent, universality and phase transition for products of random matrices, `https://arxiv.org/abs/1810.00433`.

20. Karl Liechty and Dong Wang, Asymptotics of free fermions in a quadratic well at finite temperature and the Moshe-Neuberger-Shapiro random matrix model, `https://arxiv.org/abs/1706.06653`.

19. Eunghyun Lee and Dong Wang, Distributions of a particle's position and their asymptotics in the q-deformed totally asymmetric zero range process with site dependent jumping rates, `https://arxiv.org/abs/1703.08839`, to appear in *Stochastic Process. Appl.*.

18. Karl Liechty and Dong Wang, Nonintersecting Brownian bridges between reflecting or absorbing walls, *Adv. Math.*, 309 (2017), 155–208.

17. Tom Claeys, Arno B. J. Kuijlaars, Karl Liechty and Dong Wang, Propagation of singular behavior for Gaussian perturbations of random matrices, *Comm. Math. Phys.*, 362 (2018), no. 1, 1–54.

16. Karl Liechty and Dong Wang, Two Lax systems for the Painlevé II equation, and two related kernels in random matrix theory, *SIAM J. Math. Anal.*, 48 (2016), no. 5, 3618–3666.

15. Dong Wang and David Waugh, The transition probability of the q-TAZRP (q-Bosons) with inhomogeneous jump rates, *SIGMA* 12 (2016), 036, 16 pages, Contribution to the special issue on Asymptotics and Universality in Random Matrices, Random Growth Processes, Integrable Systems and Statistics in honor of Percy Deift and Craig Tracy.

14. Tom Claeys, Arno B. J. Kuijlaars and Dong Wang, Correlation kernels for sums and products of random matrices, *Random Matrices Theory Appl.*, 4 (2015), no. 4, 1550017, 31pp.

13. Peter J. Forrester and Dong Wang, Muttalib–Borodin ensembles in random matrix theory — realisations and correlation functions, *Electron. J. Probab.*, 22 (2017), paper no. 54, 43pp.

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11. Ivan Corwin, Zhipeng Liu and Dong Wang, Fluctuations of TASEP and LPP with general initial data, *Ann. Appl. Probab.*, 26 (2016), no. 4, 2030–2082.

10. Karl Liechty and Dong Wang, Nonintersecting Brownian motions on the unit circle, *Ann. Probab.*, 44 (2016), no. 2, 1134–1211.

9. Mark Adler, Pierre van Moerbeke and Dong Wang, Random matrix minor processes related to percolation theory, *Random Matrices Theory Appl.*, 2 (2014), no. 4, 135008, 72pp.

8. Tom Claeys and Dong Wang, Random matrices with equispaced external source, *Comm. Math. Phys.*, 328 (2014), no. 3, 1023–1077.

7. Jinho Baik and Dong Wang, On a relationship between high rank cases and rank one cases of Hermitian random matrix models with external source, *Random Matrix Theory, Interacting Particle Systems and Integrable Systems*, Edited by Percey Deift and Peter Forrester, MSRI Publications 65 (2014), Cambridge University Press, Cambridge, 25–38.

6. Jinho Baik and Dong Wang, On the largest eigenvalue of a Hermitian random matrix model with spiked external source II. Higher rank case, *Int. Math. Res. Not. IMRN*, (2013) no. 14, 3304–3370.

5. Dong Wang, The largest eigenvalue of real symmetric, Hermitian and Hermitian self-dual random matrix models with rank one external source, part I, *J. Stat. Phys.*, 146 (2012) no. 4, 719–761.

4. Jinho Baik and Dong Wang, On the largest eigenvalue of a Hermitian random matrix model with spiked external source I. Rank 1 case, *Int. Math. Res. Not. IMRN*, (2011) no. 22, 5164–5240.

3. Dong Wang, Random matrices with external source and KP τ functions, *J. Math. Phys.*, 50 (2009), no. 7, 073506, 10pp.

2. Dong Wang, The largest sample eigenvalue distribution in the rank 1 quaternionic spiked model of Wishart ensemble, *Ann. Probab.*, 37 (2009), no. 4, 1273–1328.

1. Dong Wang, A PDE for the multi-time joint probability of the Airy process, *Phys. D*, 238 (2009), no. 8, 819–833.

Thesis

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