

- [64] B. Eynard, “Large random matrices: Eigenvalue distribution,” [arXiv:hep-th/9401165 [hep-th]].
- [65] B. Eynard, “Large N expansion of the 2 matrix model,” JHEP **01**, 051 (2003) doi:10.1088/1126-6708/2003/01/051 [arXiv:hep-th/0210047 [hep-th]].
- [66] M. Bertola, B. Eynard and J. Harnad, “Differential systems for biorthogonal polynomials appearing in 2-matrix models and the associated Riemann-Hilbert problem,” Commun. Math. Phys. **243**, 193-240 (2003) doi:10.1007/s00220-003-0934-1 [arXiv:nlin/0208002 [nlin.SI]].
- [67] M. Bertola, B. Eynard and J. Harnad, “Duality of spectral curves arising in two matrix models,” Theor. Math. Phys. **134**, 27-38 (2003) doi:10.1023/A:1021811505196 [arXiv:nlin/0112006 [nlin.SI]].
- [68] M. Bertola, B. Eynard and J. P. Harnad, “Duality, biorthogonal polynomials and multimatrix models,” Commun. Math. Phys. **229**, 73-120 (2002) doi:10.1007/s002200200663 [arXiv:nlin/0108049 [nlin.SI]].
- [69] M. Bertola and B. Eynard, “Mixed correlation functions of the two matrix model,” J. Phys. A **36**, 7733-7750 (2003) doi:10.1088/0305-4470/36/28/304 [arXiv:hep-th/0303161 [hep-th]].
- [70] M. Bertola, “Free energy of the two matrix model / dToda tau function,” Nucl. Phys. B **669**, 435-461 (2003) doi:10.1016/j.nuclphysb.2003.07.029 [arXiv:hep-th/0306184 [hep-th]].
- [71] M. Bertola, “Second and third order observables of the two matrix model,” JHEP **11**, 062 (2003) doi:10.1088/1126-6708/2003/11/062 [arXiv:hep-th/0309192 [hep-th]].
- [72] M. Bertola, B. Eynard and J. Harnad, “Semiclassical orthogonal polynomials, matrix models and isomonodromic tau functions,” Commun. Math. Phys. **263**, 401-437 (2006) doi:10.1007/s00220-005-1505-4 [arXiv:nlin/0410043 [nlin.SI]].
- [73] B. Eynard, “Loop equations for the semiclassical 2-matrix model with hard edges,” J. Stat. Mech. **0510**, P10006 (2005) doi:10.1088/1742-5468/2005/10/P10006 [arXiv:math-ph/0504002 [math-ph]].
- [74] J. Ambjorn, J. Jurkiewicz, R. Loll and G. Vernizzi, “Lorentzian 3-D gravity with wormholes via matrix models,” JHEP **09**, 022 (2001) doi:10.1088/1126-6708/2001/09/022 [arXiv:hep-th/0106082 [hep-th]].
- [75] R. d. Koch, A. Jevicki, X. Liu, K. Mathaba and J. P. Rodrigues, “Large N optimization for multi-matrix systems,” JHEP **01**, 168 (2022) doi:10.1007/JHEP01(2022)168 [arXiv:2108.08803 [hep-th]].

- [76] X. Han and S. A. Hartnoll, “Deep Quantum Geometry of Matrices,” *Phys. Rev. X* **10**, no.1, 011069 (2020) doi:10.1103/PhysRevX.10.011069 [arXiv:1906.08781 [hep-th]].
- [77] E. Rinaldi, X. Han, M. Hassan, Y. Feng, F. Nori, M. McGuigan and M. Hanada, “Matrix-Model Simulations Using Quantum Computing, Deep Learning, and Lattice Monte Carlo,” *PRX Quantum* **3**, no.1, 010324 (2022) doi:10.1103/PRXQuantum.3.010324 [arXiv:2108.02942 [quant-ph]].
- [78] Brunekreef, Joren, Luca Lionni, and Johannes Thürigen. ”One-matrix differential reformulation of two-matrix models.” arXiv preprint arXiv:2108.00540 (2021).
- [79] Hernández-del-Valle, G. 2015. ”On the zeros of the Pearcey integral and a Rayleigh-type equation,” arXiv e-prints. doi:10.48550/arXiv.1506.02502
- [80] Duits, M., Kuijlaars, A. B. J., Mo, M. Y. 2010. The Hermitian two matrix model with an even quartic potential. arXiv e-prints. doi:10.48550/arXiv.1010.4282
- [81] Duits, M., Kuijlaars, A. B. J., Mo, M. Y. 2012. Asymptotic analysis of the two matrix model with a quartic potential. arXiv e-prints. doi:10.48550/arXiv.1210.0097
- [82] Universality in the Two Matrix Model with a Monomial Quartic and a General Even Polynomial Potential. *Communications in Mathematical Physics* 291, 863–894. doi:10.1007/s00220-009-0893-2
- [83] Duits, M., Kuijlaars, A. B. J. 2008. Universality in the two matrix model: a Riemann-Hilbert steepest descent analysis. arXiv e-prints. doi:10.48550/arXiv.0807.4814
- [84] Duits, M. 2013. Painlevé kernels in Hermitian matrix models. arXiv e-prints. doi:10.48550/arXiv.1302.1710
- [85] Richard Bruce Paris. 2012. “On the Asymptotics and Zeros of a Class of Fourier Integrals”. *European Journal of Pure and Applied Mathematics* 5 (3):260-81.
- [86] N G de Bruijn. The roots of trigonometric integrals, *Duke Math. J.* 17:197–226, 1950.
- [87] D. Senouf, ”Asymptotic and numerical approximations of the zeros of Fourier transforms”, *SIAM J. Analysis* 27, 1102 (1996).
- [88] D A Cardon. Fourier transforms having only real zeros, *Proc. Amer. Math. Soc.* 133:1349–1356, 2004.
- [89] J Kamimoto, H Ki and Y-O Kim. On the multiplicities of the zeros of Laguerre–Pólya functions, *Proc. Amer. Math. Soc.* 128:189–194, 1999.
- [90] G.Polya, ”On the zeros of an integral function represented by Fourier’s integral”, *Messenger of Math* 52, 185 (1923).

- [91] Breuer, J., Duits, M. 2013. The Nevai condition and a local law of large numbers for orthogonal polynomial ensembles. arXiv e-prints. doi:10.48550/arXiv.1301.2061
- [92] Dominici, D., "Asymptotic analysis of the Hermite polynomials from their differential-difference equation." arXiv Mathematics e-prints. doi:10.48550/arXiv.math/0601078
- [93] H. Ki, "The zeros of Fourier Transformations".
- [94] D.Dimitrov ,P. Rusev (2011). Zeros of entire Fourier transforms. East Journal on Approximations. 17.
- [95] G.Franca, A. LeClair, A. 2013. On the zeros of L-functions. arXiv e-prints. doi:10.48550/arXiv.1309.7019
- [96] Cardon, David A. and Sharleen A. Roberts. "An equivalence for the Riemann Hypothesis in terms of orthogonal polynomials." J. Approx. Theory 138 (2006): 54-64.
- [97] Mazhouda, Kamel and Sami Omar. "The Cardon and Robert Criterion for the Riemann hypothesis." Analysis 33 (2013): 309 - 318.
- [98] Newman, Charles M., and Wei Wu. "Constants of de Bruijn-Newman type in analytic number theory and statistical physics." arXiv preprint arXiv:1901.06596 (2019).
- [99] R. Mahajan, D. Stanford and C. Yan, "Sphere and disk partition functions in Liouville and in matrix integrals," JHEP **07**, 132 (2022) doi:10.1007/JHEP07(2022)132 [arXiv:2107.01172 [hep-th]].
- [100] E. Witten, "THE 1 / N EXPANSION IN ATOMIC AND PARTICLE PHYSICS," NATO Sci. Ser. B **59**, 403-419 (1980) doi:10.1007/978-1-4684-7571-5_21
- [101] S. Coleman, "Aspects of Symmetry: Selected Erice Lectures," Cambridge University Press, 1985, ISBN 978-0-521-31827-3 doi:10.1017/CBO9780511565045
- [102] G. 't Hooft, "A Planar Diagram Theory for Strong Interactions," Nucl. Phys. B **72**, 461 (1974) doi:10.1016/0550-3213(74)90154-0
- [103] J. Carlson, J. Greensite, M. B. Halpern and T. Sterling, "DETECTION OF MASTER FIELDS NEAR FACTORIZATION," Nucl. Phys. B **217**, 461-464 (1983) doi:10.1016/0550-3213(83)90157-8
- [104] M. B. Halpern, "MICROCANONICAL MASTER FIELDS," Nucl. Phys. B **254**, 603-618 (1985) doi:10.1016/0550-3213(85)90237-8
- [105] M. B. Halpern and C. Schwartz, "Infinite dimensional free algebra and the forms of the master field," Int. J. Mod. Phys. A **14**, 4653-4686 (1999) doi:10.1142/S0217751X99002189 [arXiv:hep-th/9903131 [hep-th]].

- [106] O. Haan, “LARGE N AS A THERMODYNAMIC LIMIT,” Phys. Lett. B **106**, 207-210 (1981) doi:10.1016/0370-2693(81)90909-6
- [107] R. Gopakumar, “N = 1 theories and a geometric master field,” JHEP **05**, 033 (2003) doi:10.1088/1126-6708/2003/05/033 [arXiv:hep-th/0211100 [hep-th]].
- [108] O. Haan, “On the Structure of Planar Field Theory,” Z. Phys. C **6**, 345 (1980) doi:10.1007/BF01474809
- [109] L. Accardi, I. Y. Aref’eva, S. V. Kozyrev and I. V. Volovich, “The Master field for large N matrix models and quantum groups,” Mod. Phys. Lett. A **10**, 2323-2334 (1995) doi:10.1142/S0217732395002489 [arXiv:hep-th/9503041 [hep-th]].
- [110] M. Engelhardt and S. Levit, “Variational master field for large N interacting matrix models: Free random variables on trial,” Nucl. Phys. B **488**, 735-774 (1997) doi:10.1016/S0550-3213(97)00043-6 [arXiv:hep-th/9609216 [hep-th]].
- [111] T. Kuroki, “Master field on fuzzy sphere,” Nucl. Phys. B **543**, 466-484 (1999) doi:10.1016/S0550-3213(98)00815-3 [arXiv:hep-th/9804041 [hep-th]].
- [112] M. R. Douglas, “Stochastic master fields,” Phys. Lett. B **344**, 117-126 (1995) doi:10.1016/0370-2693(94)01547-P [arXiv:hep-th/9411025 [hep-th]].
- [113] R. Gopakumar and D. J. Gross, “Mastering the master field,” Nucl. Phys. B **451**, 379-415 (1995) doi:10.1016/0550-3213(95)00340-X [arXiv:hep-th/9411021 [hep-th]].
- [114] J. Greensite and M. B. Halpern, “QUENCHED MASTER FIELDS,” Nucl. Phys. B **211**, 343 (1983) doi:10.1016/0550-3213(83)90413-3
- [115] J. Greensite, “Variational Method for Quenched Master Fields,” Phys. Lett. B **121**, 169-172 (1983) doi:10.1016/0370-2693(83)90908-5
- [116] J. M. Alberty and J. Greensite, “APPROXIMATION TECHNIQUES FOR THE QUENCHED MASTER FIELD EQUATIONS,” Nucl. Phys. B **238**, 39-60 (1984) doi:10.1016/0550-3213(84)90465-6
- [117] F. R. Klinkhamer, “A first look at the bosonic master-field equation of the IIB matrix model,” Int. J. Mod. Phys. D **30**, no.13, 2150105 (2021) doi:10.1142/S0218271821501054 [arXiv:2105.05831 [hep-th]].
- [118] M. McGuigan, “Quantum Computing and the Riemann Hypothesis,” [arXiv:2303.04602 [quant-ph]].
- [119] W. van Dam, Wim. ”Quantum computing and zeroes of zeta functions.” arXiv preprint quant-ph/0405081 (2004).

- [120] V. A. Kazakov, “Solvable matrix models,” [arXiv:hep-th/0003064 [hep-th]].
- [121] D. J. E. Callaway, “Random matrices, fractional statistics and the quantum Hall effect,” *Phys. Rev. B* **43**, 8641 (1991) doi:10.1103/PhysRevB.43.8641
- [122] A. Cappelli, C. A. Trugenberger and G. R. Zemba, “Large N limit in the quantum Hall Effect,” *Phys. Lett. B* **306**, 100-107 (1993) doi:10.1016/0370-2693(93)91144-C [arXiv:hep-th/9303030 [hep-th]].
- [123] A. Cappelli and M. Riccardi, “Matrix model description of Laughlin Hall states,” *J. Stat. Mech.* **0505**, P05001 (2005) doi:10.1088/1742-5468/2005/05/P05001 [arXiv:hep-th/0410151 [hep-th]].
- [124] V. Kazakov and Z. Zheng, “Analytic and numerical bootstrap for one-matrix model and “unsolvable” two-matrix model,” *JHEP* **06**, 030 (2022) doi:10.1007/JHEP06(2022)030 [arXiv:2108.04830 [hep-th]].
- [125] H. W. Lin, “Bootstrap bounds on D0-brane quantum mechanics,” [arXiv:2302.04416 [hep-th]].
- [126] H. W. Lin, “Bootstraps to strings: solving random matrix models with positivity,” *JHEP* **06**, 090 (2020) doi:10.1007/JHEP06(2020)090 [arXiv:2002.08387 [hep-th]].
- [127] X. Han, S. A. Hartnoll and J. Kruthoff, “Bootstrapping Matrix Quantum Mechanics,” *Phys. Rev. Lett.* **125**, no.4, 041601 (2020) doi:10.1103/PhysRevLett.125.041601 [arXiv:2004.10212 [hep-th]].
- [128] P. Dutta and S. Dutta, “Phase Space Distribution of Riemann Zeros,” *J. Math. Phys.* **58**, no.5, 053504 (2017) doi:10.1063/1.4982737 [arXiv:1610.07743 [hep-th]].
- [129] A. Chattopadhyay, P. Dutta and S. Dutta, “Emergent Phase Space Description of Unitary Matrix Model,” *JHEP* **11**, 186 (2017) doi:10.1007/JHEP11(2017)186 [arXiv:1708.03298 [hep-th]].
- [130] A. Chattopadhyay, P. Dutta, S. Dutta and D. Ghoshal, “Matrix Model for Riemann Zeta via its Local Factors,” *Nucl. Phys. B* **954**, 114996 (2020) doi:10.1016/j.nuclphysb.2020.114996 [arXiv:1807.07342 [math-ph]].
- [131] M. Cvetič and A. A. Tseytlin, “Charged string solutions with dilaton and modulus fields,” *Nucl. Phys. B* **416**, 137-172 (1994) doi:10.1016/0550-3213(94)90581-9 [arXiv:hep-th/9307123 [hep-th]].
- [132] J. Garcia-Bellido and M. Quiros, “String effective actions and cosmological stability of scalar potentials,” *Nucl. Phys. B* **385**, 558-570 (1992) doi:10.1016/0550-3213(92)90058-J [arXiv:hep-th/9204079 [hep-th]].

- [133] J. H. Horne and G. W. Moore, “Chaotic coupling constants,” Nucl. Phys. B **432**, 109-126 (1994) doi:10.1016/0550-3213(94)90595-9 [arXiv:hep-th/9403058 [hep-th]].
- [134] E. Gonzalo, L. E. Ibáñez and Á. M. Uranga, “Modular symmetries and the swampland conjectures,” JHEP **05**, 105 (2019) doi:10.1007/JHEP05(2019)105 [arXiv:1812.06520 [hep-th]].
- [135] A. Font, L. E. Ibanez, D. Lust and F. Quevedo, “Strong - weak coupling duality and nonperturbative effects in string theory,” Phys. Lett. B **249**, 35-43 (1990) doi:10.1016/0370-2693(90)90523-9
- [136] N. Gendler, M. Kim, L. McAllister, J. Moritz and M. Stillman, “Superpotentials from singular divisors,” JHEP **11**, 142 (2022) doi:10.1007/JHEP11(2022)142 [arXiv:2204.06566 [hep-th]].
- [137] R. Donagi, A. Grassi and E. Witten, “A Nonperturbative superpotential with E(8) symmetry,” Mod. Phys. Lett. A **11**, 2199-2212 (1996) doi:10.1142/S0217732396002198 [arXiv:hep-th/9607091 [hep-th]].
- [138] G. Curio and D. Lust, “A Class of N=1 dual string pairs and its modular superpotential,” Int. J. Mod. Phys. A **12**, 5847-5866 (1997) doi:10.1142/S0217751X97003066 [arXiv:hep-th/9703007 [hep-th]].
- [139] J. M. Leedom, N. Righi and A. Westphal, “Heterotic de Sitter beyond modular symmetry,” JHEP **02**, 209 (2023) doi:10.1007/JHEP02(2023)209 [arXiv:2212.03876 [hep-th]].
- [140] S. Alexander, K. Dasgupta, A. Maji, P. Ramadevi and R. Tatar, “de Sitter State in Heterotic String Theory,” [arXiv:2303.12843 [hep-th]].
- [141] N. Cribiori and D. Lust, “A note on modular invariant species scale and potentials,” [arXiv:2306.08673 [hep-th]].