

## References

- [Disertori and Rivasseau, 2000a] Disertori, M. and Rivasseau, V. Continuous constructive fermionic renormalization. In *Annales Henri Poincaré*, volume 1, pages 1–57. Birkhäuser Verlag, 2000a.
- [Disertori and Rivasseau, 2000b] Disertori, M. and Rivasseau, V. Interacting fermi liquid in two dimensions at finite temperature. part i: convergent attributions. *Communications in Mathematical Physics*, 215(2):251–290, 2000b.
- [Disertori and Rivasseau, 2000c] Disertori, M. and Rivasseau, V. Interacting fermi liquid in two dimensions at finite temperature. part ii: renormalization. *Communications in Mathematical Physics*, 215(2):291–341, 2000c.
- [Disertori and Rivasseau, 2000d] Disertori, M. and Rivasseau, V. Rigorous proof of fermi liquid behavior for jellium two-dimensional interacting fermions. *Physical review letters*, 85(2):361, 2000d.
- [Disertori et al., 2001] Disertori, M., Magnen, J., and Rivasseau, V. Interacting fermi liquid in three dimensions at finite temperature: Part i: Convergent contributions. In *Annales Henri Poincaré*, volume 2, pages 733–806. Birkhäuser Verlag, 2001.
- [Disertori et al., 2002] Disertori, M., Pinson, H., and Spencer, T. Density of states for random band matrices. *Communications in mathematical physics*, 232:83–124, 2002.
- [Disertori, 2004] Disertori, M. Density of states for gue through supersymmetric approach. *Reviews in Mathematical Physics*, 16(09):1191–1225, 2004.
- [Disertori, 2006] Disertori, M. Constructive renormalization for interacting fermions. *Letters in Mathematical Physics*, 78:263–277, 2006.
- [Disertori et al., 2007] Disertori, M., Gurau, R., Magnen, J., and Rivasseau, V. Vanishing of beta function of non-commutative  $\phi_4^4$  theory to all orders. *Physics Letters B*, 649(1):95–102, 2007.

- [Disertori and Rivasseau, 2007] Disertori, M. and Rivasseau, V. Two-and three-loop beta function of non-commutative  $\phi^4$  theory. *The European Physical Journal C*, 50:661–671, 2007.
- [Disertori and Rivasseau, 2008] Disertori, M. and Rivasseau, V. Random matrices and the anderson model. *Panoramas & Synthèses*, 25:161–2023, 2008.
- [Disertori and Spencer, 2010] Disertori, M. and Spencer, T. Anderson localization for a supersymmetric sigma model. *Communications in Mathematical Physics*, 300:659–671, 2010.
- [Disertori et al., 2010] Disertori, M., Spencer, T., and Zirnbauer, M. R. Quasi-diffusion in a 3d supersymmetric hyperbolic sigma model. *Communications in Mathematical Physics*, 300:435–486, 2010.
- [Disertori and Giuliani, 2013] Disertori, M. and Giuliani, A. The nematic phase of a system of long hard rods. *Communications in Mathematical Physics*, 323:143–175, 2013.
- [Disertori et al., 2013] Disertori, M., Magnen, J., and Rivasseau, V. Parametric cutoffs for interacting fermi liquids. In *Annales Henri Poincaré*, volume 14, pages 925–945. SP Birkhäuser Verlag Basel, 2013.
- [Disertori et al., 2014] Disertori, M., Merkl, F., and Rolles, S. W. Localization for a nonlinear sigma model in a strip related to vertex reinforced jump processes. *Communications in Mathematical Physics*, 332:783–825, 2014.
- [Disertori et al., 2015] Disertori, M., Sabot, C., and Tarres, P. Transience of edge-reinforced random walk. *Communications in Mathematical Physics*, 339(1):121–148, 2015.
- [Disertori et al., 2016] Disertori, M., Merkl, F., and Rolles, S. W. A comparison of a nonlinear sigma model with general pinning and pinning at one point. *Electron. J. Probab.*, 21:1–16, 2016.
- [Disertori and Sodin, 2016] Disertori, M. and Sodin, S. Semi-classical analysis of non-self-adjoint transfer matrices in statistical mechanics i. In *Annales Henri Poincaré*, volume 17, pages 437–458. Springer International Publishing, 2016.

- [El Abdalaoui and Disertori, 2016] El Abdalaoui, E. and Disertori, M. Spectral properties of the möbius function and a random möbius model. *Stochastics and Dynamics*, 16(01):1650005, 2016.
- [Disertori and Lager, 2017] Disertori, M. and Lager, M. Density of states for random band matrices in two dimensions. In *Annales Henri Poincaré*, volume 18, pages 2367–2413. Springer International Publishing, 2017.
- [Disertori et al., 2017] Disertori, M., Merkl, F., and Rolles, S. W. A supersymmetric approach to martingales related to the vertex-reinforced jump process. *ALEA, Lat. Am. J. Probab. Math. Stat.*, 14:529–555, 2017.
- [Disertori et al., 2019] Disertori, M., Merkl, F., and Rolles, S. W. Martingales and some generalizations arising from the supersymmetric hyperbolic sigma model. *ALEA, Lat. Am. J. Probab. Math. Stat.*, 16:179–209, 2019.
- [Disertori et al., 2020] Disertori, M., Giuliani, A., and Jauslin, I. Plate-nematic phase in three dimensions. *Communications in Mathematical Physics*, 373:327–356, 2020.
- [Disertori and Lager, 2020] Disertori, M. and Lager, M. Supersymmetric polar coordinates with applications to the lloyd model. *Mathematical Physics, Analysis and Geometry*, 23(1):2, 2020.
- [Disertori et al., 2021] Disertori, M., Lohmann, M., and Sodin, S. The density of states of 1d random band matrices via a supersymmetric transfer operator. *Journal of spectral theory*, 11(1):125–191, 2021.
- [Disertori et al., 2022a] Disertori, M., Merkl, F., and Rolles, S. W. The non-linear supersymmetric hyperbolic sigma model on a complete graph with hierarchical interactions. *ALEA, Lat. Am. J. Probab. Math. Stat.*, 19:1629–1648, 2022a.
- [Disertori et al., 2022b] Disertori, M., Rapenne, V., Rojas-Molina, C., and Zeng, X. Phase transition in the integrated density of states of the anderson model arising from a supersymmetric sigma model. *arXiv preprint arXiv:2211.10268*, 2022b.

[Disertori et al., 2023] Disertori, M., Merkl, F., and Rolles, S. W. Transience of vertex-reinforced jump processes with long-range jumps. *arXiv preprint arXiv:2305.07359*, 2023.

[Disertori et al., 2024a] Disertori, M., Maturana Escobar, R., and Rojas-Molina, C. Decay of the green's function of the fractional anderson model and connection to long-range saw. *Journal of Statistical Physics*, 191(3):33, 2024a.

[Disertori et al., 2024b] Disertori, M., Merkl, F., and Rolles, S. W. Fluctuations in the non-linear supersymmetric hyperbolic sigma model with long-range interactions. *arXiv preprint arXiv:2408.08136*, 2024b.