Dr. Dominik Schröder

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Publications & Talks

28 Publications

Phase transition in the density of states of quantum spin glasses *2014*

L. Erdős und D. Schröder

***Math. Phys. Anal. Geom.*, 17**, *441–464, (2014)*

arXiv:1407.1552, 10.1007/s11040-014-9164-3.

Fluctuations of rectangular Young diagrams of interlacing Wigner eigenvalues *2016*

L. Erdős und D. Schröder

***Int. Math. Res. Not. IMRN**, 3255–3298, (2018)*

arXiv:1608.05163, 10.1093/imrn/rnw330.

Fluctuations of functions of Wigner matrices *2016*

L. Erdős und D. Schröder

***Electron. Commun. Probab.*, 21**, *Paper no. 86, 15, (2016)*

arXiv:1610.07084, 10.1214/16-ECP38.

Random matrices with slow correlation decay *2017*

L. Erdős, T. Krüger und D. Schröder

***Forum Math. Sigma**, 7, Paper No. e8, 89, (2019)*

arXiv:1705.10661, 10.1017/fms.2019.2.

Correlated random matrices: band rigidity and edge universality *2018*

J. Alt, L. Erdős, T. Krüger und D. Schröder

***Ann. Probab.*, 48**, *963–1001, (2020)*

arXiv:1804.07744, 10.1214/19-AOP1379.

Cusp universality for random matrices I: local law and the complex Hermitian case *2018*

L. Erdős, T. Krüger und D. Schröder

***Comm. Math. Phys.*, 378**, *1203–1278, (2020)*

arXiv:1809.03971, 10.1007/s00220-019-03657-4.

Cusp universality for random matrices, II: The real symmetric case *2018*

G. Cipolloni, L. Erdős, T. Krüger und D. Schröder

***Pure Appl. Anal.*, 1**, *615–707, (2019)*

arXiv:1811.04055, 10.2140/paa.2019.1.615.

Edge universality for non-Hermitian random matrices *2019*

G. Cipolloni, L. Erdős und D. Schröder

***Probab. Theory Related Fields, 179**, 1–28, (2021)*

arXiv:1908.00969, 10.1007/s00440-020-01003-7.

Optimal lower bound on the least singular value of the shifted Ginibre ensemble *2019*

G. Cipolloni, L. Erdős und D. Schröder

***Probab. Math. Phys.*, 1**, *101–146, (2020)*

arXiv:1908.01653, 10.2140/pmp.2020.1.101.

Central limit theorem for linear eigenvalue statistics of non-Hermitian random matrices *2019*

G. Cipolloni, L. Erdős und D. Schröder

***Comm. Pure Appl. Math.**, **76**, 946–1034, (2023)*

arXiv:1912.04100, 10.1002/cpa.22028.

Fluctuation around the circular law for random matrices with real entries *2020*

G. Cipolloni, L. Erdős und D. Schröder

***Electron. J. Probab.**, **26**, Paper No. 24, 61, (2021)*

arXiv:2002.02438, 10.1214/21-EJP591.

Eigenstate thermalization hypothesis for Wigner matrices *2020*

G. Cipolloni, L. Erdős und D. Schröder

***Comm. Math. Phys.**, **388**, 1005–1048, (2021)*

arXiv:2012.13215, 10.1007/s00220-021-04239-z.

Functional central limit theorems for Wigner matrices *2020*

G. Cipolloni, L. Erdős und D. Schröder

***Ann. Appl. Probab.**, **33**, 447–489, (2023)*

arXiv:2012.13218, 10.1214/22-aap1820.

Thermalisation for Wigner matrices *2021*

G. Cipolloni, L. Erdős und D. Schröder

***J. Funct. Anal.**, **282**, Paper No. 109394, 37, (2022)*

arXiv:2102.09975, 10.1016/j.jfa.2022.109394.

Normal fluctuation in quantum ergodicity for Wigner matrices *2021*

G. Cipolloni, L. Erdős und D. Schröder

***Ann. Probab.**, **50**, 984–1012, (2022)*

arXiv:2103.06730, 10.1214/21-aop1552.

Analysis of one-hidden-layer neural networks via the resolvent method *2021*

V. Piccolo und D. Schröder

***Advances in Neural Information Processing Systems**, Bd. 34, S. 5225–5235, (2021)*

arXiv:2105.05115.

On the condition number of the shifted real Ginibre ensemble *2021*

G. Cipolloni, L. Erdős und D. Schröder

***SIAM J. Matrix Anal. Appl.**, **43**, 1469–1487, (2022)*

arXiv:2105.13719, 10.1137/21M1424408.

Density of Small Singular Values of the Shifted Real Ginibre Ensemble *2021*

G. Cipolloni, L. Erdős und D. Schröder

***Ann. Henri Poincaré**, **23**, 3981–4002, (2022)*

arXiv:2105.13720, 10.1007/s00023-022-01188-8.

Quenched universality for deformed Wigner matrices *2021*

G. Cipolloni, L. Erdős und D. Schröder

***Probab. Theory Related Fields**, **185**, 1183–1218, (2023)*

arXiv:2106.10200, 10.1007/s00440-022-01156-7.

On the spectral form factor for random matrices *2021*

G. Cipolloni, L. Erdős und D. Schröder

***Comm. Math. Phys.**, **401**, 1665–1700, (2023)*

arXiv:2109.06712, 10.1007/s00220-023-04692-y.

Optimal multi-resolvent local laws for Wigner matrices *2021*

G. Cipolloni, L. Erdős und D. Schröder

Electron. J. Probab.*, *27*, *Paper No. 117, 38, (2022)

arXiv:2112.13693, 10.1214/22-ejp838.

Rank-uniform local law for Wigner matrices *2022*

G. Cipolloni, L. Erdős und D. Schröder

Forum Math. Sigma*, *10*, *Paper No. e96, 43, (2022)

arXiv:2203.01861, 10.1017/fms.2022.86.

Directional extremal statistics for Ginibre eigenvalues *2022*

G. Cipolloni, L. Erdős, D. Schröder und Y. Xu

J. Math. Phys.*, *63*, *Paper No. 103303, 11, (2022)

arXiv:2206.04443, 10.1063/5.0104290.

On the rightmost eigenvalue of non-Hermitian random matrices *2022*

G. Cipolloni, L. Erdős, D. Schröder und Y. Xu

Ann. Probab.*, *51*, *2192–2242, (2023)

arXiv:2206.04448, 10.1214/23-aop1643.

Mesoscopic central limit theorem for non-Hermitian random matrices *2022*

G. Cipolloni, L. Erdős und D. Schröder

Probab. Theory Related Fields*, *188*, *1131–1182, (2024)

arXiv:2210.12060, 10.1007/s00440-023-01229-1.

Optimal lower bound on eigenvector overlaps for non-Hermitian random matrices *2023*

G. Cipolloni, L. Erdős, J. Henheik und D. Schröder

Journal of Functional Analysis*, *110495, (2024)

arXiv:2301.03549, 10.1016/j.jfa.2024.110495.

Deterministic equivalent and error universality of deep random features learning *2023*

D. Schröder, H. Cui, D. Dmitriev und B. Loureiro

ICML 2023*, *(2023)

arXiv:2302.00401.

Asymptotics of Learning with Deep Structured (Random) Features *2024*

D. Schröder, D. Dmitriev, H. Cui und B. Loureiro

ICML 2024*, *(2024)

arXiv:2402.13999.

Talks

IAS Park City Mathematics Institute *Park City, USA*

PCMI Summer School (Poster presentation) *2017*

University of Warwick *Warwick, UK*

Probability Seminar *2017*

TU München *München*

Seminar *Analysis und Zufall* *2018*

Universität Wien *Wien, Österreich*

Wahrscheinlichkeitstheorie Seminar *2018*

Universität Basel — *Basel, Schweiz*
Wahrscheinlichkeitstheorie Seminar — *2018*

Random Physical Systems — *Puerto Natales, Chile*
Konferenz — *2018*

University of Geneva — *Les Diablerets, Schweiz*
Workshop *Statistical Mechanics* — *2019*

Institut Henri Poincaré — *Paris, Frankreich*
MEGA-Seminar, Working group on random matrices and graphs — *2019*

KTH Royal Institute of Technology — *Stockholm, Schweden*
Random Matrix Theory Seminar — *2019*

QMath14 — *Aarhus, Dänemark*
Random Systems Session — *2019*

ETH Zürich — *Zürich, Schweiz*
Wahrscheinlichkeitstheorie Seminar — *2019*

Universität Genf — *Genf, Schweiz*
Mathematische Physik Seminar — *2019*

Universität Erlangen — *Erlangen*
Mathematische Physik Seminar — *2019*

MFO Oberwolfach — *Oberwolfach*
Workshop Random Matrices — *2019*

University of Melbourne — *Melbourne, Australien*
Random matrix theory seminar — *2020*

Universität Basel, Schweiz — *Basel, Schweiz*
Machine Learning Seminar — *2020*

ICMP (International Congress on Mathematical Physics) — *Genf, Schweiz*
Contributed Talk, Session Probability & Random Structures — *2021*

NeurIPS (Conference on Neural Information Processing Systems) — *Sydney, Australien*
Poster presentation — *2021*

ICTP Trieste — *Trieste*
Youth in High Dimensions — *2022*

ICML (International Conference on Machine Learning) — *Hawaii, USA*
Poster presentation — *2023*