Dr. Dominik **Schröder**

✉ dschroeder@ethz.ch | ⌂ n.ethz.ch/~dschroeder

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)

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arXiv:2112.13693, 10.1214/22-ejp838.
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Rank-uniform local law for Wigner matrices *2022*

G. Cipolloni, L. Erdős und D. Schröder

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

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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)

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arXiv:2206.04443, 10.1063/5.0104290.
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On the rightmost eigenvalue of Non-Hermitian random matrices *2022*

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

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 Relat. Fields, (2023)

```
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

Preprint, (2023)

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arXiv:2301.03549.
```

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

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

ICML 2023, (2023)

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arXiv:2302.00401.
```

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

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

Preprint, (2024)

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arXiv:2402.13999.
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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*