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Random matrix theory has also found applications to the chiral Dirac operator in quantum chromodynamics, quantum gravity in two dimensions, mesoscopic physics, spin-transfer torque, the fractional quantum Hall effect, Anderson localization, quantum dots, and superconductors

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Random Matrix Theory and its Innovative Applications 3 Fig. 2

Comparing the singular values of a transmission matrix to that of a random matrix suggests that there are no spurious correlations. independent and identically distributed (i.i.d.) standard normal, then the eigen-

values of the Wishart matrix $A^T A = m$ in the limit as $m = n = r$ and $m, n \rightarrow \infty$ are

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¹Department of Economics, MIT Institute for Quantitative Social Science, Harvard University SEA '06
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