NORMS OF STRUCTURED RANDOM MATRICES

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Consider a structured Gaussian random matrix $(a_{ij}g_{ij})$, where the g_{ij}'s are independent standard Gaussian random variables and the coefficients a_{ij} are deterministic. The exact behaviour of the spectral norm of such a random matrix is known due to a result of Latała, van Handel, and Youssef from 2018. During the talk we will be interested in two-sided bounds for the expected value of the norm of a structured Gaussian random matrix treated as an operator from ℓ_p^n to ℓ_q^m. Based on joint work with Radosław Adamczak, Joscha Prochno, and Marta Strzelecka.