

# AG Zufallsmatrizen Seminar

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## **Matrix product ensembles of Hermite-type**

We investigate spectral properties of a Hermitised random matrix product which, contrary to previous product ensembles, allows for eigenvalues on the full real line. We find an explicit expression of the joint probability density function as a bi-orthogonal ensemble. As an interesting example, we focus on the product of GUE and LUE matrices and provide explicit expressions both for the bi-orthogonal functions and the correlation kernel. Then a new double-side kernel is found at the origin, which is slightly different from the Bessel kernel. This talk is based on joint work with P. J. Forrester and J. R. Ipsen.

**Wednesday, 21.06.2017, 16:00 Uhr  
V3-201**