TRUNCATED LINEAR STATISTICS ASSOCIATED WITH THE TOP EIGENVALUES OF RANDOM MATRICES

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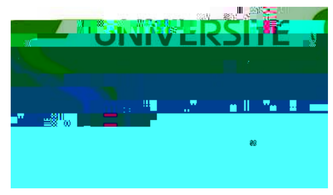

PROBLEM

Starting from the jpdf of eigenvalues $P(\lambda_1, \ldots, \lambda_N)$, two well studied questions:

distribution of the largest eigenvalue λ_1

distribution of linear statistics $\sum_{n=1}^{N} f(\lambda_n)$

Here, intermediate problem: given any function f, determine the distribution of