



Mathematics and CS Seminar

Transfer operator approach to 1D random band matrices

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We apply the SUSY method to derive integral representations for the correlation functions of characteristic polynomials of Hermitian and non-Hermitian random band matrices. The structure of the obtained formulas allows us to apply the transfer operator approach in the 1D case. Thus, the analysis of the correlation function is replaced by the spectral analysis of some non-self-adjoint integral operator. The results of the analysis give us an understanding of the mechanism of the transition from the "localized" to "delocalized" spectral behavior of one-dimensional band matrices.

Monday, October 21, 2024 03:45pm - 04:45pm

Central Bldg / O1 / Mondi 2 (I01.O1.008)



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